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RESULT 1585
AAV83938/c
ID AAV8393
XX AAV8393
XX Yeast
DT 03-MAR-
XX Yeast
KW rell di
XX neocent
KW cell di
XX human a
XX NO98517
XX NO98517
XX 13-MAY-
PR 26-AUG-
XX AAVRA-)
PR (AMRA-)
PR WPI; 15
XX NEW isc
PT euckary
PT artific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated mammalian (e.g., human or mouse) CC lipase polypeptide (polyp), e.g., LPDL (I) or LPDLR polyp (II). (I) or CC (II) is useful for identifying substances which can bind with LPDL or CC LPDLR polyp, and for identifying a compound that affects the binding of LPDL or LPDLR polyp and an LPDL or identifying a compound that affects the binding of CC their nucleic acid is useful for identifying a compound that affects LPDL or LPDLR polyp activity or expression. (I) or (II) or their nucleic acid is useful for detecting or monitoring a condition associated with CC increased or decreased LPDL or LPDLR expression or activity in an animal, CC where the condition is lipase deficiency, atherosclerosis, fatty liver CC disease and dyslipidemias, such as hypercholesterosis, fatty liver CC deficient states, and/or any other tissue or plasma disorders of lipid or CC inpoprotein metabolism. The nucleic acid is useful for diagnosing the CC expending a germline alteration in the nucleic acid in the CC involves detecting a germline alteration in the nucleic acid in the CC inhibiting expression or activity of (I) or (II). The nucleic acid is useful for as a probe or primer. The present sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yeast artificial chromosome; YAC; probe; eukaryotic chromosome; neocentromere; replication; extra-chromosomal element; segregation; cell division; artificial chromosome; gene therapy; human artificial chromosome; transgenic; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0
                                                                     New isolated nucleic acid comprising neocentromere sequences eukaryotic chromosome - used to produce replicable, segregat: artificial chromosomes that can carry large amounts of DNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV83938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV83938 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                exemplification
                                                                                                                                                                                                                                                      13-MAY-1997;
26-AUG-1997;
                                                                                                                                                                                                                                                                                                          13-MAY-1998;
                                                                                                                                                                                                                                                                                                                                            19-NOV-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   869 GATTACAGGCGTGAGCCACC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                                    AMRAD
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                                                                                                                                                                                                                    OPERATIONS PTY LTD
                                                                                                                                                                                                                                                      97AU-00006784.
97AU-00008791.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                produce a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.7%;
                                                                                                                                                                                  Cancilla MR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75; 172pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YAC probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 16.8; DB 1;
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽;
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                                                                       for gene
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Example 1;

Page 24; 540pp; English

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RESULT 1586
AAT39828/c
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AAT39826-T39833 represent amplification primers used to amplify the autonomously replicating DNA sequence (ARS) represented by AAT39825. The primers were used to amplify successively smaller regions of the HeLa HSP70 gene (including the 5' untranslated region) to obtain the ARS. The primer set designated A (AAT39826) amplified the largest HSP70 gene fragment. The next largest fragment was amplified by primer set D (AAT39827 and AAT39828), then set B (AAT39829 and AAT39830), and set C (AAT39831 and AAT39832) amplified the sequence shown in AAT39825. The sequences amplified by these primers all contained the HSP-MYC-A and HSP-MYC-B regions. The amplified ARS sequence is inserted into a plasmid which is then capable of autonomous replication in an episome state in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Autonomous replication; episome; transgenic animal; mammal; human; PCR; plasmid; peptide production; polymerase chain reaction; primer; amplify; HSP-MYC; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-DEC-1996
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                                                                                                                                                                                                                                                            Example; Page 7; 15pp; Japanese.
                                                                                                                                                                                                                                                                                                 Autonomously replicating DNA sequence - used to produce autonomously replicating plasmid for the production of heterologous proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-JUL-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JP08173166-A
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                                                                                                                                                                                                                                                                                                                                                                                                           (DAUC ) DAIICHI PHARM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
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Similarity 84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 19;
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                                                       Query Match
Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         host cells. The replication of this plasmid in the host cells is also very stable. The host cells used are cells derived from mammals, preferably from a human. The plasmid is useful to provide a large amount of heterologous peptide in recombinant cells. The offspring of an animal carrying the gene can be used as peptide producing animals
                                                                                                              Sequence 18
                                                                                                                                                     with anti-infective, anti-inflammatory and cytostatic activity. The oligonucleotides are RIP-1 antisense inhibitors and are used in the diagnosis, prevention and treatment of conditions associated with RIP-1 expression. Conditions associated with RIP-1 expression include various
                                                                                                                                                                                                             This sequence represents an antisense oligonuclectide which binds to the 3' untranslated region of RIP-1. RIP-1 (also known as RalBP1 and RIIP) is a GTPase activating protein (GAP) thought to be a downstream target of Ral. The invention relates to antisense phosphorothicate oligonuclectides
                                                                                                                                                                                                                                                                                      Example 15;
                                                                                                                                                                                                                                                                                                                Antisense inhibition of human RIP-1 expression, useful for diagnosing preventing and treating conditions such as inflammation.
                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-146889/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6020198-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RIP-1; RalBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human RIP-1 antisense oligonucleotide ISIS# 23931.
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                                                                                                                                         infections,
                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
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                          383
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18
                                                       l Similarity
17; Conserv
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                          CCTCCCAAAGTGCTGGGA 400
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                                                                                                             BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                         inflammation and tumour formation
                                                                                                                                                                                                                                                                                     Col 27; 26pp; English.
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                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-00161443
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                                                                    1.7%;
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                                                                    Score 16.4;
Pred. No. 1.
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Pred. No. 1.
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                                                        Mismatches
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1.5e+03;
                                                                    .5e+03
                                                                                   DB 1;
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                                                                                Length 18;
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                                                       Gaps
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RESULT 1588

14-DEC-1999

US6001652-A

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RESULT 1589
AAZ39625
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ID AAZ89747 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents an antisense oligonucleotide which binds to the 3 untranslated region of RIP-1 RIP-1 (also known as RalBP1 and RLIP) is a GTPase activating protein (GAP) thought to be a downstream target of Ral. The invention relates to antisense phosphorothicate oligonucleotides with anti-infective, anti-inflammatory and cytostatic activity. The oligonucleotides are RIP-1 antisense inhibitors and are used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis, prevention and treatment of conditions associated with RIP-1 expression. Conditions associated with RIP-1 expression include various
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                    Synthetic
                                                                                    Human; cREL;
                                                                                                                              Human cREL mRNA inhibiting antisense oligo ISIS #24109
                                                                                                                                                                           28-FEB-2000
                                                                                                                                                                                                                       AAZ39625;
                                                                                                                                                                                                                                                                AAZ39625
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-146889/13.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                        1112
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                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTGGTCTCAAACTCC 1129
                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation and tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27; 26pp;
                                                                                       transcriptional activator; antisense compound; therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cowsert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RLIP; antisense inhibitor; anti-inflammatory; cytostatic; e; diagnose; prevent; treatment; tumour formation; ss.
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RESULT 1590
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention provides antisense compounds targeted to a coding region, 3'UTR or 5'UTR of a nucleic acid molecule encoding human CREL (transcriptional activator). The antisense compounds are useful as research agents and diagnostics such as in the elucidation of the function of a particular gene. The antisense compounds can be useful as therapeutic modalities that can be configured to be useful in treatment regimes for treatment of cells, tissues and animals, especially humans. In the prior art, there are no known therapeutic agents which effectively inhibit the synthesis of CREL and additional agents capable of inhibiting CREL function are still required. Sequences AR339588-627 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Col 28; 26pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-1998;
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                                                                 WPI; 2001-290930/30
                                                                                                                      Picoult-Newburg L,
                                                                                                                                                                              (ORCH-) ORCHID BIOSCIENCES INC
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New genotyping oligonucleotide, useful for detecting the presence.

WPI; 2001-290930/30

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AAH38918/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
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                                                                                                                                                                                                                                                                                                                                                                  polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; s
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                                                             Picoult-Newburg L,
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THE REPORT OF THE PROPERTY OF 
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WPI; 2001-290930/30
                                                         Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
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                                                                                                                                                                                                                                                                       13-OCT-2000; 2000WO-US028436
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Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           specific upper PCR primer SEQ ID 2061.
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                                                                                                                                   ORCHID BIOSCIENCES INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58; 83pp; English
                                                                                                                                                                                                       99US-0160096P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.7%;
94.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 16.4;
Pred. Np. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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CC primer extension (SNPE) primers, and the sequences of regions flanking CC includes kits for determining the presence or absence of a SNP, using the coligonucleotides of the invention. The PCR primers are used to amplify a CC SNP flanking sequence, the SNPE primer is used as a genotyping primer. The persence or absence of a SNP, using the coligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The CC oligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence of coligonucleotides are useful penotypic traits include diseases e.g. coligonucleotides appears the genotypic traits include diseases e.g. coligonucleotides and acute intermittent porphyria. Phenotypic consteogenesis imperfecta and acute intermittent porphyria. Phenotypic consteogenesis imperfecta and acute intermittent porphyria. Phenotypic consteogenesis imperfecta and acute intermittent porphyria. Phenotypic constenses, including, rheumatoid archititis, multiple sclerosis, concerning acute of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic acid sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page
                                                                        or a human SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60; 83pp; English
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밁 Best Loc Matches Query Match Local 375 TGCCTCAGCCTCCCAAAG 392 Н l Similarity 17; Conserv TGCCTCAGCCACCCAAAG 18 Conservative 1.7%; 0; Score 16.4; Pred. No. 1. ed. No. 1.5e+03 Mismatches DB 1; Length 18, Indels <u>,</u> Gaps

0

18 BP; 5

A; 8 C; 3 G; 2 T; 0 U; 0 Other;

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30-NOV-2001
                            AAH47615;
                                                              AAH47615 standard; DNA; 18 BP
(first entry)
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Human Her-3 mRNA inhibiting antisense oligo ISIS # 19628

Her-3; epidermal growth factor; EGF; receptor/tyrosine kinase; human; antiinflammatory; cytostatic; antibacterial; antisense; ss.

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Synthetic.
 Homo
sapiens.
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US6277640-B1.

21-AUG-2001.

31-JUL-2000; 2000US-00630706

31-JUL-2000; 2000US-00630706

ISIS PHARM INC

Bennett CF, Cowsert LM;

WPI; 2001-535134/59.

Antisense compounds capable of modulating expression of human Her-3,

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RESULT 1594
ABA8241
ABA8241
XX AB
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention provides antisense compounds capable of inhibiting the expression of human Her-3, a member of epidermal growth factor (EEF) family of receptor/tyrosine kinases. The antisense oligonucleotides are useful for inhibiting the expression of Her-3 in cells or tissues. They are commonly used as research reagents and in diagnostics for example, to elicidate the function of particular genes. The antisense compounds are also useful for distinguishing between functions of various members of a biological pathway and for research use. They are also utilized for diagnostics, therapeutics, prophylaxis and in kits. They are useful prophylactically, e.g. to prevent or delay infection, inflammation or tumor formation. Sequences AAH47532-47615 represent chimeric antisense phosphozothioate oligonucleotides having 2.-MOE wings and a deoxy gap,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         member
useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence tagged site; STS; osteoporosis; osteopathic; gene therapy; antisense therapy; vaccine; bone disorder; Paget's disease; adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-APR-2000; 2000US-00543771
05-APR-2000; 2000US-00544398
The present invention describes the human Zmax1 gene and the high mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 a genes have osteopathic activities. The genes can be used in gene t antisense therapy and in the production of vaccines. They can be u
                                                                                                                                                                                                 New high bone mass (HBM) and Zmax1 genes and proteins useful modulating bone mass for the treatment of e.g. osteoporosis.
                                                                                                                                                                                                                                                                                       WPI; 2001-657171/75
                                                                                                                                                                                                                                                                                                                                                Carulli JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-2000; 2000WO-US016951
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; high bone mass; HBM gene; Zmax1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zmax1 gene region physical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABA82413;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABA82413 standard;
                                                                                                                                                 Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               388 CAAAGTGCTGGGATTACA 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of epidermal growth for preventing or de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 Similarity 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                        GENOME THERAPEUTICS CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the inhibition of Her-3 mRNA expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAGTGCTGAGATTACA
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                                                                                                                                                 Page 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                             Little RD,
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                                                                                                                                              443pp; English
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delaying
                                                                                                                                                                                                                                                                                                                                                Recker RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   map preparation STS marker
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 16.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                   Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene; chromosome 11; 11q13.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
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l and HBM
therapy,
used in
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RESULT 1595
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Best Local S
Matches 17
                        Matches
                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the diagnosis and treatment of bone disorders including Paget's disease, sclerostosis, osteomalacia and fibrous ABA82038 to ABA82700 and AAG68168 to AAG68193 represent the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3; sequence tagged site; STS; osteoporosis; osteopathsic; gene therapy; antisense therapy; vaccine; bone disorder; Paget's disease; adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; s
                                                                                              The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and H genes have osteopathic activities. The genes can be used in gene thera antisense therapy and in the production of vaccines. They can be used the diagnosis and treatment of bone disorders including osteoporosis, paget's disease, sclerostosis, osteomalacia and fibrous dysplasia. ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18
                                                                                                                                                                                                                                                                                                               05-APR-2000;
05-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zmax1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABA82195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABA82195 standard;
                                                                Sequence
                                                                                                                                                                                        Disclosure;
                                                                                                                                                                                                            modulating bone mass
                                                                                                                                                                                                                          New high
                                                                                                                                                                                                                                                WPI; 2001-657171/75.
                                                                                                                                                                                                                                                                     Carulli JP,
                                                                                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-US016951
                                                                                                                                                                                                                                                                                                                                                                                            WO200177327-A1
                                                                                                                                                                                                                                                                                           (GENO-)
                                                                                      exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     392 GTGCTGGGATTACAGGCG
   685
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                         17;
                                                                                                                                                                                                                                                                                           GENOME THERAPEUTICS CORP.
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                                   Similarity
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                                                                 B₽;
                                                                                                                                                                                       Page 34; 443pp; English
                                                                                                                                                                                                                                                                                                              2000US-00543771.
2000US-00544398.
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                                                                                                                                                                                                                                                                      Little
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                                                                                       of the present invention
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94.4%;
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                                  Score 16.4;
Pred. No. 1
                                                                                                                                                                                                               treatment
                                                                                                                                                                                                                          Zmax1
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                                                                                                                                                                                                                                                                      RR,
                          Mismatches
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No. 1
                                                                                                                                                                                                                          genes
                                                                   0 U;
                                                                                                                                                                                                                                                                       Johnson ML;
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                                    .5e+03
                                                                    0 Other;
                                                                                                                                                                                                                         and proteins useful
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                                              DB 1;
                                                                                                                                                                                                               e.g. osteoporosis
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                                              Length
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                          Indels
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s dysplasia.
t sequences used
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18

CTCTGCCTCCAGGGTTCA

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ABS9BOTT 1596
ABS9BO53
ID 98053
XX ABS9BO5
XX Human m
XX Human m
XX Human m
XX Human in COT2B7;
KW Multidt
KW Altered
KW Central
XX MO20025
XX Guida M
XX Homo 88
XX WO20025
XX For Selection
CC This ir
CC Transfe
CC (UGT12BR
CC (U
This invention relates to the sequence of an isolated nucleic acid CC molecule comprising at least one base variation from that of a known cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A1), cytochrome P450 A2 (CYP4501A2), CC cytochrome P450 O2E1 (CYP4501E1), adrenergic receptor beta1 (ADBR1), CC cytochrome P450 O2E1 (CYP4501E1), adrenergic receptor beta1 (ADBR1), CC cytochrome P450 O2E1 (CYP4501E1), adrenergic receptor beta1 (ADBR1), CC cytochrome P450 O2E1 (CYP4501E1), adrenergic receptor nuclear translocator CC (ARNT), cathepsin S (CTSS), cytochrome P450 A2 (CYP4501A2), cathepsin S (CTSS), cytochrome passe activating CC inhibitor (DBI), pepxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl CC transferase (NNWT), MADPH quinone oxidoreductase 2 (NQO2), could be compared thermolabile (STM), UDP-glucuronosyl transferase 2B4 (CYT2B1), UDP-glucuronosyl transferase 2B7 (GT2B1), UDP-glucuronosyl cransferase (UGT2B1), urokinase receptor (UPA), multidrug resistance 1 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (CRMP3), orphan nuclear receptor (NRNI2), or actylcholine muscarinic creceptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. CC The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterising the genes that CC are responsible for specific traits within the genome and eventually cidentifying the genes responsible for a variety of disorder-related CC traits as a result of their e.g., overexpression, constitutive captures on the polymorphism in the human genes cited in the invention are useful as constitutive constitutive constitutive constitutive constitutive constitutive constitutive captures on the polymorphism constitutive constitutive captures constitutive captures constitutive captures constitutive captures constitutive captures captures captures captures captures captures captures captures captures capture
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-698522/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-NOV-2001; 2001WO-US044838.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 22; Page 141; 714pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DNAS-)
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P450 A2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      system; pulmonary; immunological.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       resistance gene PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #17.
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                                                      cc and/or treating the disorders. The nucleic acid molecules comprising the cpolymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1, CC ARNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR, CC MIRI and/or MIR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2, CRPATOLA2, MIR1 and/or MIR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHWR2 are used to screen for altered cardiovascular function, in COX2 for altered susceptibility to colorectal tumours, in DB1 or CHWR1 for altered central nervous system function, in FLAP and HNMT for altered gulmonary, cc immunological or haematological function, in The prostate, in LTF for altered immunological or protease activity in the prostate, in LTF for altered immunological or cc protease activity in the prostate, in LTF for altered altered central and companies of the colorected contral and companies and colorected contral through the sequence represents a PCR crimer used to amplify the sequences of the invention
Sequence 18 BP; 4 A; 2 C; 8
G; 4 T; 0 U; 0 Other;
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밁 Ś Matches Query Match 867 GGGATTACAGGCGTGAGC 884 17; Conser Conservative 94.4%; 1.7%; 18 ٥, Score 16.4; Pred. No. Mismatches 1.5e+03 DB 1; Length 18; Indels 0,

0

RESULT 1597
ABK22992/c
ID ABK2299
XX ABK2299
XX ABK2299
XX O9-APRXX Human;
XW Human;
XW Lipid-a
XX Homo sa
XX Homo sa
XX Homo sa
XX Homo sa
XX (GENO-)
PF 25-MAYXX (GENO-)
PA (UYCR-)
YA (GENO-)
PA (UYCR-)
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PA (UYCR-)
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PA (ITAN-)
YA (GENO-)
YA (GENO-) Human Zmax1 cDNA reverse PCR primer #77. 09-APR-2002 Human; mouse; ABK22992 standard; DNA; 18 (first entry)

lipid associated condition; arteriosclerosis; cardiovascular disease; ss; osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up; neurovascular condition; wound healing; gene therapy; PCR primer; probe; bone development disorder; antiarteriosclerotic; cardiovascular; cerebroprotective Zmax1; HBM; high bone mass gene; lipid regulation; stroke;

Homo sapiens.

WO200192891-A2

06-DEC-2001.

25-MAY-2001; 2001WO-US016946

26-MAY-2000; 2000US-00578900

GENOME THERAPEUTICS CORP.

(UYCR-)

UNIV CREIGHTON

SCHOOL MEDICINE

Carulli JP, Little RD, Recker RR, Johnson

WPI; 2002-097784/13.

diagnosing, treating or preventing e.g., arter: identifying a molecule that binds to high bone corresponding wild type gene. Identifying molecules involved in lipid regulation, useful for arteriosclerosis, mass gene ဝူ comprises

Disclosure; Page 39; 409pp; English.

The invention relates to a method for identifying a molecule involved in lipid regulation comprising identifying a molecule that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type gene, Zmax1. Compounds identified by the method are useful for treating, diagnosing, preventing or screening for normal and abnormal lipid-

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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               associated conditions, including arteriosclerosis, cardiovascular disease, stroke, and osteoporosis. The compounds may also be used in the treatment or prevention of diabetic atherosclerosis, neurovascular conditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in gene therapy, pharmaceutical development, and diagnostic assays for bone development disorders. Molecules identified by comparison of Zmax1 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 5 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HBM systems can be used as surrogate markers in pharmaceutical development, in diagnosis of human or animal bone disease, and in the treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lipid-associated condition; arteriosclerosis; cardiovascular disease; 88; osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up; neurovascular condition; wound healing; gene therapy; PCR primer; probe; bone development disorder; antiarteriosclerotic; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Zmax1 cDNA reverse PCR primer #186.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABK23210;
The invention relates to a method for identifying a molecule involved in lipid regulation comprising identifying a molecule that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type gene, Zmax1. Compounds identified by the method are useful for treating, diagnosing, preventing or screening for normal and abnormal lipid-associated conditions, including arteriosclerosis, cardiovascular disease, stroke, and osteoporosis. The compounds may also be used in the treatment or prevention of diabetic atherosclerosis, neurovascular
                                                                                                                                                                                     Identifying molecules involved in lipid regulation, useful diagnosing, treating or preventing e.g., arteriosclerosis, identifying a molecule that binds to high bone mass gene of corresponding wild type gene.
                                                                                                                                                                                                                                                                                                                                                   (GENO-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                osteopathic;
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                                                                                                                                                        Disclosure; Page 41; 409pp; English.
                                                                                                                                                                                                                                                                              WPI; 2002-097784/13.
                                                                                                                                                                                                                                                                                                                  Carulli JP, Little RD,
                                                                                                                                                                                                                                                                                                                                                                                                    26-MAY-2000; 2000US-00578900
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
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                                                                                                                                                                                                                                                                                                                                                   SCHOOL
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                     MEDICINE
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'Anditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in gene therapy, pharmaceutical development, and diagnostic assays for bone development disorders. Molecules identified by comparison of Zmax1 and HBM systems can be used as surrogate markers in pharmaceutical the development, in diagnosis of human or animal bone disease, and in the treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA treatment of bone diseases. Sequences ABK25776-ABK23411 represent cDNA treatment of bone diseases.
                         The present invention describes human NEDL-1 is located to chromosome 7, more specifically to 7p. The present invention also describes a nucleic acid probe comprising: (a) a nucleic acid with a p of the base sequence of the 6200 base pair sequence given in ACC49481 (I), or its complementary base sequence; or (b) a nucleic acid hybridisable with the nucleic acid with a base sequence of (I) or its complementary base sequence under stringent conditions. The NEDL-1 gen and its encoded protein can be used in the diagnosis and prognosis of neuroblastoma. The present sequence represents a PCR primer for GAPDH, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; NEDL-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human GAPDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC49483;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and adapters of the invention
                                                                                                                                                                                                              Novel gene NED-1 as probes of neuroblastoma.
                                                                                                                                                                                                                                                                                Nakagawara A,
                                                                                                                                                                                                                                                                                                              (HISM )
                                                                                                                                                                                                                                                                                                                                                       24-AUG-2001;
18-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2002; 2002WO-JP008524.
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                                                                                                                                                                                  Example 5; Page 34; 86pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 17; Conserv
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CHIBA PREFECTURE.
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                                                                                                                                                                                                                                                                                                                                                       2001JP-00254974.
2002JP-00116753.
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                                                                                                                                                                                                                                                                                  Miyazaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              neuroblastoma; GAPDH; PCR primer;
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Query Match Best Local S Matches 17

1.7%;
al Similarity 94.4%;
17; Conservative

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Mismatches

Score 16.4; DB 1; Pred. No. 1.5e+03;

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Length 18;

Indels

0,

Gaps

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Sequence

18

BP; 5

A; 3 C; 6 G; 4 T; 0 U;

0 Other;

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RESULT 1600
ACC45793
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                              The invention relates to novel transgenic animals expressing the high CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene, comprising an alteration of the gene encoding LRP5 or LRP6, or expressing CC an LRP5 that is modulated by an altered gene control sequence introduced by homologous or non-homologous recombination. The transgenic animals are for the situdy of bone density modulation or bone mass modulation. The conclusion has osteopathic and cycostatic activity. The polymucleotides of the invention has osteopathic and cycostatic activity. The polymucleotides of crucheic acids are for the study of bone density modulation. The conclusion may have a use in gene therapy. The transgenic animals and cycostatic acids are transgenic animals of the same compositions in more than one parameter selected from bone density, bone strength, trabecular number, bone size, or bone tissue connectivity. The cransgenic animals, nucleic acids and methods are useful for identifying conscules involved in bone development, and for developing pharmaceutical compositions, which may be employed for treating or preventing bone compositions, which may be employed for treating and nucleic acids are also useful in methods for diagnosing diseases involved in bone development, conceptuals of the bone. The transgenic animals and nucleic acids are also useful in methods for diagnosing diseases involved in bone development, cor characterised by reduced bone density or mass. The present sequence is considered in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New transgenic animals (e.g. mice), useful as models for studying bone density modulation, developing drugs for treating or preventing bone diseases (e.g. osteoporosis), or diagnosing diseases characterized by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAY-2001; 2001US-0290071P.
17-MAY-2001; 2001US-0291311P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; bone density modulation; bone strength; trabecular number; bone size; bone tissue connectivity; bone disease; osteoporosis; PCR; osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation; gene therapy; bone density modulation; bone strength; trabecular number; bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human HBM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC45793 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 57; 603pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-129278/12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    reduced bone density
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENOME WYETH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTAGAGACAGGGTTTCAC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAGAAACAGGGTTTCAC 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STS marker reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bex FJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THERAPEUTICS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yaworsky PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bodine
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Best Local Similarity

1.7%;

Score 16.4; DB 1; Pred. No. 1.5e+03;

Length 18

Query Match

1.7%;

Score

16.4;

DB 1;

Length

Sequence

Query Match Sequence 18

BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

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RESULT 1601
ACC45575/c
ID ACC45577
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XX ACC4557
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ACC4557
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                                                     The invention relates to novel transgenic animals expressing the high CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene, comprising an alteration of the gene encoding LRP5 or LRP6, or expressing CC an LRP5 that is modulated by an altered gene control sequence introduced by homologous or non-homologous recombination. The transgenic animals are CC for the study of bone density modulation or bone mass modulation. The cc invention has osteopathic and cytostatic activity. The polynucleotides of CC the invention may have a use in gene therapy. The transgenic animals and CC uncleic acids are for the study of bone density modulation, where the bone mass is modulated relative to non-transgenic animals of the same CC species in more than one parameter selected from bone density, bone strength, trabecular number, bone size, or bone tissue connectivity. The consciudes involved in bone development, and for developing pharmaceutical compositions, which may be employed for treating or preventing bone CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or neoplasms of the bone. The transgenic animals and nucleic acids are also useful in methods for diagnosing diseases involved in bone development, or characterised by reduced bone density or mass. The present sequence is used in the exemplification of the invention
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17-MAY-2001;
01-FEB-2002;
04-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New transgenic animals (e.g. mice), useful as models for studying bone density modulation, developing drugs for treating or preventing bone diseases (e.g. osteoporosis), or diagnosing diseases characterized by reduced bone density.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Babij P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human HBM STS marker reverse primer #77.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; 2001US-0290071P.
; 2001US-0291311P.
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; 2002US-0361293P.
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      BP; 5 A;
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      4 C; 7
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          2 T; 0
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      ٦,
          0 Other;
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RESULT 1603
ACA62881/c
ID ACA6288
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ACC45283
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                   The present invention describes the human BMCC1 protein. The BMCC1 gene has high homology with a part of BNIP2, and is located to the chromosome 9. BMCC1 has cytostatic activity. The BMCC1 protein and its encoded gene are applicable in studying biology, pathology and the onset of cancer. BMCC1 can also be used in the diagnosis prognosis and screening of drugs for tumour e.g. neuroblastoma, including the provision of gene data and protein function on human neuroblastoma. The present sequence represents a PCR primer for human GAPDH, which is used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                  Novel human BMCCI protein and encoded gene having high homology with a part of BNIP2, applicable in studying biology, pathology and onset of cancer, as well as diagnosis, prognosis and screening of drugs for tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HISM )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GAPDH
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                                                                                                                                                                                                    Sequence 18 BP; 5
                                                                                                                                                                                                                           present
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  21-AUG-2003
                        ACA62881;
                                               ACA62881
                                                                                                                                                       Local Similarity
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                                                                                                                       316 GTAGAAACAGGGTTTCAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BMCC1; chromosome 9; cytostatic; cancer; tumour; neuroblastoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HISAMITSU PHARM CO LTD CHIBA PREFECTURE.
                                                                                                                                                                                                                                                                                                                                                  9;
                                                                                                                                                                                                                             invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCTGCCTCCAGGGTTCA
                                               standard;
                                                                                                          GTAGAGACAGGGTTTCAC
                                                                                                                                                                                                                                                                                                                                                 Page 27; 99pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer SEQ ID NO:49.
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  (first entry)
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                                                 DNA; 18
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                                                                                                                                                                 1.7%;
                                                                                                                                                                                                    3 C; 6 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sakaki Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
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                                                                                                                                                                  Score 16.4; DB 1;
Pred. No. 1.5e+03;
                                                                                                                                                        Mismatches
                                                                                                                                                                            Length 18;
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                                                                                                                                                                                                                                                                                                                                                                        CC The invention describes a method of determining presence or absence of a CC desired nucleic acid (NA) that contains multiple repeats of a CC providing a treated sample that may contain the desired NA in which CC providing a treated sample that may contain the desired NA in which CC several predetermined repeating NA target sequences are hybridised with a CC NA probe, analysing for presence of hybridised NA containing the MA CC probe, and thereby the presence or absence of the desired NA. The method CC is useful for determining the presence or absence of desired nucleic CC acids that contain multiple repeats of a predetermined NA target CC sequence, in a NA sample obtained from a biological sample, where the CC distinguishing human and bacterial NA. The method is highly sensitive, CC and enables detection and quantification of the presence of a NA without the need to undergo a NA target sequence enrichment step prior to a NA CC hybrid detection SA NA target sequence repeated NA that contains multiple repeats of a NA target sequence. This contains multiple repeats of a NA target sequence. This
                                                                                                                                                                                RESULT 1604
                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Repeated nucleic acid detection method, human probe Alull.
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25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repeated nucleic acid detection; human; alu; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 27; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-479484/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mandrekar MN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-DEC-2000; 2000US-00739909
                                                                                         04-DEC-2003
                                                                                                                       ADB98491;
                                                                                                                                                  ADB98491 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                  Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SHUL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MAND/) MANDREKAR M N.
                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                        17;
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SHULTZ J W.
                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                         AGTAGCTGGGACTACAGG 746
                                                                                                                                                                                                                              AGTAGCTGGGATTACAGG 1
                                                                                                                                                                                                                                                                                                                                                  BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                        Conservative
                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tereba A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-00358972.
99US-00383316.
                                                                                                                                                                                                                                                                                                      1.7%;
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                                                                                                                                                     ₽P
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                                                                                                                                                                                                                                                                                                      Score 16.4; DB 1; Pred. No. 1.5e+03;
                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ä
                                                                                                                                                                                                                                                                                                                        DB 1; Length
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                                                                                                                                                                                                                                                                                                                         18;
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                                                                                                                                                                                                                                                                                           Gaps
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Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmaxl; LRP6; Sequence tagged site #372 used to prepare Zmax1 (LRP5) gene region map.

osteoporosis; STS;

sequence

0

bone

mass

modulation;

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ADB98273/
ID ADB9
XX
AC ADB9
XX
DT 04-D
XX
DE Sequ
XX
Oste
KW Oste
KW bone
XX
Homc
XX
Hom
ST-1
PR 11-1
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) ar LRP6 mutants, which results in a HBM-like phenotype when expressed in cell. The HBM-like phenotype results in bone mass modulation and/or lilevel modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence is a Sequence Tagged Site (STS) marker, which was used to prepare a physical map of the Zmax1 (LRP5) creater.
11-MAY-2001; 2001US-0290071P.
17-MAY-2001; 2001US-029131P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
                                                                                                                               Homo
                                                                                                                                                   Osteopathic; Gene the bone mass modulation;
                                                                                                                                                                                     Sequence tagged site #154 used
                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                           ADB98273 standard;
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; Page 63; 629pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          suffering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid comprising a mutation in LRP5 or LRP6, useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject
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17-MAY-2001; 2001US-0291311P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200292000-A2
                                                          13-MAY-2002; 2002WO-US014877
                                                                                                        WO200292000-A2
                                                                                                                                                                                                                                    ADB98273;
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                                                                                                                              sapiens.
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                                                                                                                                                                                                                                                                                                                                                               17;
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                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                  GTACTGGGATTACAGGCG
                                                                                                                                                                                                                                                                                                                                        GTGCTGGGATTACAGGCG 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anisowicz
                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            BP; 4 A;
                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e.g. osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THERAPEUTICS
                                                                                                                                                              therapy; High
                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                          1.7%;
                                                                                                                                                                                                             entry)
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                                                                                                                                                                                                                                                                                                                                                                                                            3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                     osteoporosis;
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                                                                                                                                                                                                                                                           BP
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                                                                                                                                                                                                                                                                                                                                                                          Score 16.4; DB 1
Pred. No. 1.5e+03
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                                                                                                                                                              Bone
                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                    prepare
                                                                                                                                                     e Mass; HBM; LRP5;
STS; sequence tagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morales
                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                     Zmax1
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                                                                                                                                                                                     (LRP5)
                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                     tagged
                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                     Zmax1; LRP6;
ged site; ds.
                                                                                                                                                                                     gene
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                                                                                                                                                                                    region
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                                                                                                                                                                                     map.
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RESULT 1606
ADH59603
ID ADH5960
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          wew nucreic acid comprising a mutation in LRP5 or LRP6, useful diagnosing a HBM-like phenotype in a subject and for preparing composition for modulating bone mass and/or lipid levels in a suffering from e.g. osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and LRP6 mutants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence is a Sequence Tagged Site (STS) context, which was used to prepare a physical map of the Zmax1 (LRP5) gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 5
                                 acid.
                                         Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic
                                                                                       WPI; 2003-421160/39.
                                                                                                             Kirtsen NV,
                                                                                                                                                                     24-SEP-2001; 2001US-0324499P
                                                                                                                                                                                                                 03-APR-2003
                                                                                                                                                                                                                                       WO2003027328-A2
                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                    probe.
                                                                                                                                                                                                                                                                                               non-nucleotide
                                                                                                                                                                                                                                                                                                                    Non-nucleotide probe
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                                                                                                                                                                                          24-SEP-2002;
                                                                                                                                                                                                                                                                                                                                          25-MAR-2004
                                                                                                                                    DAKO-)
                                                                                                                                                BOST-)
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                                                                                                                                   BOSTON PROBES INC.
DAKOCYTOMATION DENMARK AS.
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                                                                                                                                                                                                                                                                                                                                                                                       standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTGCCTCCAGGGTTCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                            Hyldig-Nielsen
                                                                                                                                                                                           2002WO-US030573
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                             probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62; 629pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 4 C; 7
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f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.48;
                                                                                                                                                                                                                                                                                               Bacterial Artificial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    702
                                                                                                                                                                                                                                                                                                                     invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred.
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         English.
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                                                                                                               Williams
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                                                                                                                                                                                                                                                                                               Chromosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                               clone;
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                                                                                                                                                                                                                                                                                               BAC;
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Claim

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103pp;

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CC useful for suppressing the binding of one or more detectable nucleic acid probes, that are greater than 100 base pairs and that have been derived from genomic nucleic acid, to one or more detectable nucleic acid comprises contacting the sample with the mixture of probes (preferably CC comprises contacting the sample with the mixture of probes (preferably CC comprises contacting the sample with the mixture of probes (preferably CC comprises contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one or convered detectable nucleic acid probes to the target genomic nucleic of the sample with the one or accell, and the sample is metaphase spreads, interphase nucleic or nucleic control genomic nucleic acid probes to the target genomic nucleic of that of a control sample using a genomic nucleic acid with the order of control genomic nucleic acid, which are differentially labelled, the array or both the sample and control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array or both the sample under suitable hybridization conditions, and comparing the array with treated mixture of sample and control genomic nucleic acid with the control genomic nucleic acid acid the array to that caused by hybridization of the probe under suitable hybridization conditions, thus the caused by hybridization of the probes to genomic nucleic acid, thus the caused by hybridization of the probes to genomic nucleic acid, thus the caused by hybridization of the probes to genomic nucleic acid, thus the sample as compared with the relative copy numbers of substantially conditions, and comparing the control. The hybridization of the genomic nucleic acid, thus the sample of genomic nucleic acid that the probability of the sample of genomic nucleic acid that the probability of the sample of genomic nucleic acid hybridization of the genomic nucleic acid hybridization of the genomi
RESULT 1607
ADH59615/c
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Best Local S
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                                                                                                                                                                                           WO2003027328-A2
                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                   non-nucleotide probe; Bacterial Artificial Chromosome clone;
                                                                                                                                                                                                                                                                                                                           Non-nucleotide probe of the invention #19.
                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH59615 standard; DNA; 18
                                                                        24-SEP-2001; 2001US-0324499P
                                                                                                              24-SEP-2002; 2002WO-US030573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               731 TAGCTGGGACTACAGGCG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
17; Conserv
                  BOSTON PROBES INC.
DAKOCYTOMATION DENMARK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a non-nucleotide probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 G; 4 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
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HPI;
                                                     Kirtsen NV, Hyldig-Nielsen JJ, Williams
                                                    2003-421160/39.
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Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic

Claim 10; SEQ ID NO 21; 103pp; English.

that of a control sample using a genomic nucleic acid reference array.

The method comprises treating a sample of genomic nucleic acid and control genomic nucleic acid, which are differentially labelled, the control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array with the mixture of the probe under suitable hybridization conditions, contacting the array with treated mixture of sample and control genomic nucleic acid under suitable hybridization conditions, and comparing the intensities of the signals from the differential labels of the array to that caused by hybridization of the probes to genomic nucleic acid, thus determining one or more variations in copy numbers of sequences in the sample as compared with the relative copy numbers of substantially identical sequences in the control. The hybridization of the genomic array is determined using an intercalating dye or a detectable antibody, or its fragment, that is specific for a nucleic acid/nucleic acid hybrid. The sample of genomic nucleic acid to be tested and the reference of nucleic acid are labelled with detectable moiety such that hybridization of the genomic array is determined by determining the presence, absence, amount or location of the detectable label on the one or more genomic arrays. The genomic array comprises nucleic acid that is prepared from Bacterial Artificial Chromosome (BAC) clones. The present sequence represents a non-nucleotide probe of the invention. for determining target genomic nucleic acid of a sample. The method comprises contacting the sample with the mixture of probes (preferably comprising 5-50 probes), contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one more detectable nucleic acid probes to the target genomic nucleic acid probes to the target genomic nucleic acid the sample. The genomic nucleic acid is contained in a fixed tissue or the sample. The genomic nucleic acid is contained in a fixed tissue or the sample. cell, and the sample is metaphase spreads, interphase nucleic or nucleic found in paraffin embedded tissue material or frozen tissue sections. The probe is also useful in comparing a sample of genomic nucleic acid with useful for suppressing the binding of one or more detectable nucleic acid probes, that are greater than 100 base pairs and that have been derived from genomic nucleic acid, to one or more undesired sequences in an assay The present sequence represents a non-nucleotide probe. The probe useful for suppressing the binding of one or more detectable nucle probe is nucleic acid a of o

Sequence 18 BP; 4 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

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Query Match
Best Local S
                      Matches
731 TAGCTGGGACTACAGGCG 748
                       17;
                             Similarity
                      Conservative
                             94.4%;
                       0
                                       Score 16.4;
                               Pred.
                       Mismatches
                               No.
                              1.5e+03;
                                        DB 1;
                                       Length 18;
                       Indels
                       0
                        Gaps
                        0
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18

TAGCTGGGATTACAGGCG 1

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ADH71
human; T-cell associated disease; Vbeta; autoimmune dise degenerative nervous system disease; graft versus host dhypersensitivity disease; infectious disease; neoplastic Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis;
                                                                                                                                                                        Human Vbeta microsatellite primer #25.
                                                                                                                                                                                                                                                                                               ADH71082;
                                                                                                                                                                                                                                                                                                                                                       ADH71082 standard; DNA; 18
                                                                                                                                                                                                                                        25-MAR-2004
                                                                                                                                                                                                                                     (first entry)
                                                                                                                             disease;
                                                                                                  disease;
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neoplastic disease;

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RESULT 1609
ADH76753
ID ADH7675
XX
AC ADH7675
XX
AC ADH7675
XX
DT 22-APR-
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a kit for diagnosing and treating T-cell consociated diseases which comprises a panel of nucleic acid primers especifically priming and allowing amplification of each Vbeta gene, CC VbetaRNA or CDNA. The kit is useful for diagnosing organ transplant crejection and diagnosing and treating T-cell associated diseases, cincluding autoimmune diseases, hypersensitivity diseases, infectious diseases, careful tversus host diseases, hypersensitivity diseases, infectious diseases, carendary careful associated associated and halpheimer's diseases. Hypersensitivity diseases include multiple sclerosis and Alzheimer's diseases. Hypersensitivity diseases include Type in hypersensitivity diseases include Type and the propersensitivities such as those present in the coordinary careful associated as those caused by caused by viruses such as HTV, fungal infections such as those caused by caused by viruses candida, parasitic infections such as those caused by careful as candida, parasitic infections such as those caused by careful as t
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 17
                          22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, compuncteic acid primers specifically priming and allowing amplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           allergy; type II hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; leprosy; infections disease; viral infection; HIV; fungal infection; Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                     ADH76753;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 1276; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hood LE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2002150891-A1.
                                                                                                                ADH76753 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vbeta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ROWE/)
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                                                                                                                                                                                                                                                                               641
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancer;
                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                               CACCCAGGCTGGAGTGCA 658
                                                                                                                                                                                                                                 CATCCAGGCTGGAGTGCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rowen L;
                                                                                                                                                                                                                                                                                                                             Conservative
                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; primer; microsatellite.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00531241
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                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                  94.4%;
                                                                                                                18
                                                                                                                ВÞ
                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                  Score 16.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                No.
                                                                                                                                                                                                                                                                                                                                                  1.5e+03
                                                                                                                                                                                                                                                                                                                                                                          DB 1;
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sequence comprising one or more of the nucleotide exchanges (SNP's) given in the specification and at least 8 bases of surrounding sequence of the MCHR1 gene. The composition has anorectic activity. The polynucleotide composition may be used in gene therapy to treat the disorders of the invention. The composition is useful for diagnosing obesity related to the presence of a molecular variant of the MCHR1 gene or a susceptibility to the disorder. The MCHR1 protein or polynucleotide is useful for preparing a medicament for treating or preventing obesity related to the presence of a molecular variant of the MCHR1 gene. This polynucleotide represents an MCHR1 primer of the invention.
Sequence 18 BP; 5 A; 2 C; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                 The polynucleotide composition comprises: a sequence encoding a polypeptide with defined sequences given in the specification; a secapable of hybridizing to a melanin-concentrating hormone receptor (MCHR1) gene; a polynucleotide encoding an MCHR1 polypeptide; or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        presence of a molecular variant the disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New diagnostic composition, useful presence of a molecular variant of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            melanin-concentrating hormone receptor 1; MCHR1; anorectic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 43; 76pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-062377/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Platzer M,
Reichwald K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-2002; 2002EP-00012569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2003; 2003WO-EP005917.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  obesity; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCHR1 genomic sequence analysis primer #62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a novel diagnostic polynucleotide composition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYPH-) UNIV PHILIPPS MARBURG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Platzer C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gudermann T,
G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for diagnosing the MCHR1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hebebrand
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          obesity related to the or a susceptibility to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a sequence
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Matches Query Match Local 729 AGTAGCTGGGACTACAGG 746 μ 17; Conserv Conservative 94.48; 1.7%; 18 0 Score 16.4; DB 1; Pred. No. 1.5e+03; Mismatches Length 18; Indels 0, Gaps

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RESULT 1610 ADP08780 Homo sapiens breast cancer; cytostatic; gene therapy; human; platelet glycoprotein VI; GP6; GPVI; GPVI; chromosome 19q13.4; ss; PCR; primer; SNP; Extend primer 117 used to genotype human glycoprotein VI polymorphism 26-AUG-2004 ADP08780; ADP08780 nucleotide standard; DNA; (first entry

WO2004047767-A2

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ADP46226/c
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV;GPVI) DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-NOV-2002; 2002US-0429136P
24-JUL-2003; 2003US-0490234P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                   single nucleotide polymorphism; Rho family guanine-nucleotide exchange factor; KIAA0861; chromosome 3q27.3; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Extend
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADP46226;
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                                                                                                                                                                                                                                                                                                   10-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                     WO2004047623-A2
                                                                                                                                                                          25-NOV-2002;
24-JUL-2003;
                                                                                                                                                                                                                                                 25-NOV-2003; 2003WO-US037948
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                                                                         RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 876
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer 7 used to genotype human KIAA0861 polymorphism
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer;
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                                                                                                                        SEQUENOM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
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                                                                         Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 84; 286pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                       2002US-0429136P.
2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.78;
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                                                                            Braun
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene therapy; human;
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Pred. No. 1.5e+03;
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                                                                              Kammerer
                                                                              SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
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                                                                              Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer; PCR; SNP
                                                                            <del>بر</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPKIO, KIAAO861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample
                                                                                                                                                           from a subject.
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6 98; 289pp; English.

of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a subject at risk of breast cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The current sequence is that of an Extend primer (also described as probe) the invention which was used to genotype human Rho family guanine-nucleotide exchange factor KIAAO861 gDNA which has been mapped to The invention relates to a novel method for identifying a subject at of breast cancer comprising detecting the presence or absence of one chromosomal position 3q27.3. , S of f

Sequence 18 BP; 4 A; 7 C; 2 ភ ភ T; 0 U; 0 Other;

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                               Best Loc
Matches
                                              Query Match
                                        Local
               728 GAGTAGCTGGGACTAÇAG
18
                               l Similarity
17; Conserv
GAGTAGCTGGGATTACAG 1
                                Conservative
                                        1.7%;
                745
                                <u>,</u>
                                       Score 16.4;
Pred. No. 1
                                 Mismatches
                                        DB 1;
.5e+03;
                                 <u>'</u>--
                                                Length
                                 Indels
                                 0,
                                  Gaps
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ARCSULT 1612
AAC92328/c
ID AAC9232
XX AAC9232
XX Human t
XX Human t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; teratocarcinoma; hTera;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tera;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          teratocarcinogenesis; PCR primer;
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CN1268566-A.

04-OCT-2000.

02-MAR-2000; 2000CN-00111771 02-MAR-2000; 2000CN-00111771.

(SCHR-) SOUTH CHINA RES CENT NAT HUMAN GENE GROU

Xiao Ħ Qian В

2001-050470/07.

New human teratocarnogenesis related protein and its coding sequence.

Example 1; Page 10; 21pp; Chinese.

The present invention describes the human teratocarcinogenesis related protein, designated hTera, which is expressed in normal human marrow. Also described is a method for the preparation of the hTera protein and nucleic acid sequences, and a method of detecting human hTera nucleic acid and polypeptide sequences in sample. The present sequence represent a PCR primer used in the isolation of hTera in an example from the a PCR primer used present invention represents and

Sequence 19 BP; 6 A; 3 Ç 7 છ w 7 0 Ģ 0 Other;

DB

Length 19;

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                                                                                                                  RESULT 1613
AAS13553
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                                                         Query Match
Best Local S
Matches 17
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                           The present invention relates to the isolation of novel human and mouse VMGLOM polypeptides (long form and short form), and the nucleic acid molecules encoding them. VMGLOMs (also referred to as glomulins) are a subtype of venous malformations (VMs) called glomangiomas. In humans, VMGLOM has been mapped to chromosome 1p21-22. VMGLOMs and the nucleic acids encoding for them are useful as a medicament or for incorporation into a diagnostic kit. Such medicaments are useful for preventing, treating or alleviating disorders with a vascular component, particularly where alteration of vascular smooth muscle cell phenotype is needed, e.g. varicosities, cardiopathies or cardiomyopathies, cerebral disorders and cancer. The nucleic acids are also useful in gene thorapy. The present sequence for PCR primer 1 is used to amplify PAC 812f10 (54 T7) clone STS
                                                                                                                                                                                                                                                                                                                                                                                     New VMGLOM genes and polypeptides, useful in gene therapy or for preventing, treating or alleviating disorders with vascular component, e.g. varicosities, cardiopathies, cerebral disorders or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; VMGLOM; glomulin; venous malformation glomangioma; PCR primer; STS; sequence tagged site; PAC 812f10; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAS13553 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-FEB-2000; 2000EP-00870022.
10-APR-2000; 2000US-0195777P.
22-DEC-2000; 2000EP-00870320.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-DEC-2001
                                                                                                                 Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-557643/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200160856-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer 1 used to amplify PAC 812f10
                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 70; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-FEB-2001; 2001WO-EP001760.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2001
                                                                                                                                              sequence in the methods of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UXTO-) UNIV
                           1111 CAGGCTGGTCTCAAACTC 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                       1 Similarity
17; Conserv
N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGGCTCACTGCAACCTC 687
CAGGGTGGTCTCAAACTC 19
                                                                                                                  BP; 4 A;
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                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATHOLIQUE LOUVAIN
                                                                       1.7%;
94.4%;
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                                                                                                                  6 C; 5 G; 4 T; 0 U; 0 Other;
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Pred. No. 1.
                                                                       Score 16.4;
Pred. No. 1.
                                                          Mismatches
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                                                                       DB 1;
.6e+03;
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                                                                                     Length 19;
                                                          Indels
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RESULT 1614

21-NOV-2002

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                                                                                                                                                                                                                                          RESULT 1615
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention describes a chimeric (transgenic) animal with functioning liver cells derived from another type of animal. The invention also details methods for testing toxicity of substances on the human liver cells and the metabolic conditions of substances by the liver cells. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimeric animal with functioning foreign liver cells for testing toxicity and metabolism of drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric animal; liver; liver metabolism; liver disorder; transgenic; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Reverse primer used to isolate human liver gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS21179;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAS21179 standard; DNA; 19
                                                                                       Human; delta opioid receptor; OPRD1; ss; PCR; primer; SNP; single nucleotide polymorphism; eating disorder; anorexia energy homeostasis disorder; chromosome 1.
                                                                                                                                       Human delta opioid receptor OPRD1-1 sequencing/PCR primer PF-0081.
                                                                                                                                                                14-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 5 A; 3 C; 10
                                                                                                                                                                                                                                                                                                                                                                                                             the invention
                                                                                                                                                                                                                                                                                                                                                                                                                      invention also discusses methods for screening new treatments and drugs for human liver function disorder. This sequence is the reverse primer used to isolate a gene from human liver cells, described in the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-097571/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mukaidani C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAY-2000; 2000JP-00149079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAY-2001; 2001WO-JP004193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-NOV-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                          ABX15007;
                                                                                                                                                                                                                  ABX15007 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NISC-) JAPAN SCI & TECHNOLOGY CORP.
                                     WO200292838-A2
                                                              domo sapiens.
                                                                                                                                                                                                                                                                                                          535
                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                 l Similarity
17; Conserv
                                                                                                                                                                                                                                                                               CTCCTGCCTCAGTCTCCC 2
                                                                                                                                                                                                                                                                                                          CTCCTGCCTCAGCCTCCC 552
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                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yoshizato K,
                                                                                                                                                                                                                                                                                                                                            1.7%;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                    G; 1
                                                                                                                                                                                                                                                                                                                                               Score 16.4; DB 1; Length 19; Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              toxicity;
                                                                                                    anorexia nervosa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human;
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RESULT 1616
ACA88919
ID ACA8891
XX ACA8891
XX OB-JUL-
XX OB-Genetic
XX Genetic
XX Genetic
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XX Homo Ba
XX HOMO Ba
XX PN WO20030
XX PF 17-APR-
XX 114-OCT-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC contain the variant nucleic acid, an isolated are a delta opioid receptor variant concerns the polyment of the mucleic acid, an isolated antibody that specifically concerns the delta opioid receptor variant, a vector comprising the containt of the polymential the vector, producing the polymential of the polymential of the mucleic acid, diagnosing an agent which conditates the expression of the nucleic acid, diagnosing a genetic predisposition to an eating or energy homeostasis disorder by detecting the presence or absence of the variant nucleic acid in a patient sample, can allele specific primer that detects a polymorphism in the gene concoding a delta opioid receptor associated with an eating or energy contain the variant nucleic acids. The variants are named OPRDI-1 to contain the variant nucleic acids. The variants are named OPRDI-1 to contain the variant opioid receptor gene is located on chromosome 1. The nucleic acid molecules and delta opioid receptor variant are useful for diagnosing a genetic predisposition to an eating or energy homeostasis contact with the disorder cited. The present sequence is a sequencing cand bcR primer used to resequence the human delta opioid receptor gene and pcR primer used to resequence the human delta opioid receptor gene as sincle only enothism (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid molecule encoding a delta opioid receptor variant associated with an eating or energy homeostasis disorder, useful for diagnosing a genetic predisposition to such disorder, e.g. anorexia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an isolated delta opioid receptor variant associa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-MAY-2002; 2002WO-US014940
                                                                                                                                                Genetic marker selection; multiplex PCR amplification; prenatal diagnostic testing; foetal sex determination; genetic identification; DNA profiling; DNA fingerprinting; forensic analysis; PCR; primer; ss.
                                                                                                                                                                                                                                                                                     08-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAY-2001; 2001US-0290016P
                                                                                                                                                                                                                                             Selection and amplification of genetic markers PCR related
                                                                                                                                                                                                                                                                                                                           ACA88919;
                                                                                                                                                                                                                                                                                                                                                              ACA88919 standard; DNA; 19 BP
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   14-OCT-2002; 2002WO-AU001388.
                                                                             WO2003031646-A1
                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2003-129306/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    surrounding a single nucleotide polymorhism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAAGCAGTCCACCTGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAGCAATCCACCTGCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 C; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to an isolated nucleic acid molecule encoding variant associated with an eating or energy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378
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Pred. No. 1.6e
O; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SNP)
                                                                                                                                                                                                                                                 primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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                                   RESULT 1617
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Best Local S
Matches 17
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12-OCT-2001;
                                                                                                                                                                                                                                                                                 The invention describes a method of selecting genetic markers as targets for nucleic acid sequence amplification comprising selecting each of the genetic markers according to a heterozygosity index of 0.5 or greater. Selecting and amplification of genetic markers are useful as targets for nucleic acid sequence amplification, for genetic testing or facilitating multiplex PCR amplification from limiting amounts of target nucleic acid. The methods are also useful for improving genetic diagnostic acid. Screening methods, such as prenatal diagnostic testing, foetal sex determination or genetic identification, e.g. DNA profiling or DNA determination or genetic identification, e.g. DNA profiling or DNA fingerprinting. The nucleic acid sequence amplification is also useful in forensic analysis of degraded, old, ancient and difficult samples that are difficult to amplify and identify. This sequence represents a PCR are difficult to amplify and identify.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Selecting genetic markers as targets for nucleic acid sequence amplification, useful for improving genetic testing, e.g. fetal sex determination, comprises selecting each of the genetic markers accorderermination.
                                                                                                                                                                                                                                 Sequence 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 36; Page 39; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-381725/36
ABT34249 standard; DNA; 19
                                                                                                                                                                                                                                                                      primer used in the selection and amplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a heterozygosity index.
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                                                                                       N
                                                                                                                                                          l Similarity
17; Conserv
                                                                                                                   GTGCTGGGATTACAGGCG 409
                                                                                       GTGCTGGTATTACAGGCG 19
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                                                                                                                                                              Conservative
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2001AU-00008235.
                                                                                                                                                                                                                                   3 A;
                                                                                                                                                                             1.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ľ,
                                                                                                                                                                                                                                   3 C; 7 G; 6 T; 0 U;
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                                                                                                                                                            0.
                                                                                                                                                                               Score 16.4;
Pred. No. 1
                                                                                                                                                              Mismatches
                                                                                                                                                                               1.6e+03;
                                                                                                                                                                                                                                       0 Other;
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                                                                                                                                                                                                 ;;
                                                                                                                                                                                               Length 19;
                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                      genetic
                                                                                                                                                                                                                                                                            markers
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Eating disorder; polymorphism; dataset; allele; HGBASE serotonin receptor 1D; delta-opioid receptor; dopamine
                                       16-JUL-2001; 2001US-0305153P.
200-JUL-2001; 2001US-0306440P.
13-NOV-2001; 2001US-0331285P.
19-DEC-2001; 2001US-0340843P.
19-DEC-2001; 2001US-0340844P.
                                                                                                                                                             Unidentified
                                                                                                                                                                                 anorexia nervosa;
                                                                                                                                                                                                                        Opioid receptor D1 PCR primer
                                                                                                                                                                                                                                                                 ABT34249;
                                                                                                                     13-FEB-2003.
                                                                                                                                         WO2003012143-A1
                                                                                                                                                                                                                                             12-JUN-2003
                                                                                                  16-JUL-2002;
                    PRICE FOUND LTD
                                                                                                 2002WO-US022555
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                  bulimia nervosa; PCR; primer; ss.
                                                                                                                                                                                          delta-opioid receptor; dopamine receptor
                                                                                                                                                                                                                         SEQ ID No
                                                                                                                                                                                                                          35
                                                                                                                                                                                                       identification;
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Bergen AW,

WPI; 2003-268122/26

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ADH70769
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comprising a variant gene associated with an eating disorder and select from any of 119 polymorphisms with their corresponding genotyping in dataset, alleles and HGBAGE identification, given in the specification. The novel nucleic acid molecule has polymorphisms in the serotonin receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is useful in diagnostic and prognostic assays for eating disorders, in particular anorexia nervosa and bulinia nervosa. This polymucleotide sequence represents a opioid receptor 1D PCR primer of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                                      Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; degenerative nervous system disease; multiple sclerosis; hypersensitivity; disease; type I hypersensitivity; Goodpasture's syndrome; allergy; type II hypersensitivity; leprosy; infectious disease; viral infection; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Page 57; 149pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New
Kit for diagnozing and treating T-cell associated diseases e.g.
                              WPI; 2004-059052/06
                                                                Hood LE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human; T-cell associated disease; Vbeta; autoimmune disease; degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Vbeta
                                                                                                                                                                                                05-MAR-1999;
                                                                                                                                                                                                                                                             US2002150891-A1
                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH70769 standard; DNA; 19
                                                                                              (HOOD/) HOOD L E. (ROWE/) ROWEN L.
                                                                                                                                             19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                            ymphoproliferative disease; leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                delta-opioid receptor, or dopamine receptor D2, useful in dia prognostic assays for eating disorders, such as anorexia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic
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17; Conser
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                                                                                                                                                                                                                                                                                                                               cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAAGCAATCCACCTGCC 18
                                                              Rowen L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene repeat sequence #559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    relates to
                                                                                                                                               94US-00309335.
95US-00531241.
                                                                                                                                                                                                9908-00263959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                molecule having polymorphisms in the serotonin receptor receptor, or dopamine receptor D2, useful in diagnostic ssays for eating disorders, such as anorexia and bulimia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9 C; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   novel isolated nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G; 3 T; 0 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 16.4; DB 1;
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                              lymphoma; cancer; brain cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>.</u>.
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autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a

Disclosure; SEQ ID NO 963; 164pp; English

including autoimmune diseases, degenerative nervous system diseases, graft versus host disease, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addisease, atrophic gastritis. Degenerative nervous system diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies, Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by the yeast genus Candida, parasitic infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by wycobacterium. Neoplastic diseases include lymphoproliferative diseases such as leukaemias, lymphomas and cancers such as cancer of the brain, associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases Sequence breast. The invention relates to a kit for diagnosing and treating The present sequence represents a Vbeta gene repeat sequence. 19 BP; 3 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Score 16.4; Pred. No. 1 멂 ۳. Length

Query Match
Best Local Similarity
Matches 17; Conserv Conservative 1.7%;
94.4%; 0; Mismatches .6e+03; 1: Indels 0, Gaps 0,

밁 á 428 _ TTTTATTTTATTTTTTT 445 18

RESULT 1619 ADH71084 ID ADH7108

ADH71084 standard; DNA; 19

(first entry)

Human Vbeta microsatellite primer #27.

Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; Alzheimer's disease; hypersensitivity disease; type I hypersensitivity; human; T-cell associated disease; Vbeta; autoimmune disease; degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease;

allergy; type II hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer; breast cancer; ss; primer; microsatellite.

domo sapiens

US2002150891-A1

05-MAR-1999; 9908-00263959

PRESENTATION OF THE PRESEN 19-SEP-1994; 19-SEP-1995; 94US-00309335 95US-00531241

(HOOD/) HOOD

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ADH70436/c
ID ADH704
XX
AC ADH704
AC ADH704
AC ADH704
AX 25-MAR
AX 25-MAR
AX 44
AC ADH704
AX 45-MAR
AX 45-MAR
AX 45-MAR
AX 45-MAR
A12-MAR
A12-
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                                                                                                                                                                                                                                                                                                                                                                 human; T-cell associated disease; Wbeta; autoimmune disease; degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; no hypersensitivity disease; atrophic gastritis; addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; Alzheimer's disease; hypersensitivity disease; type I hypersensitivity disease; type I hypersensitivity; doodpasture's syndrome; allergy; type II hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Vbeta gene repeat sequence #226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2004 (first entry)
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                                                                                                                                                                                                                        Homo sapiens.
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                     cancer;
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Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-059052/06
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                                                                                                                               Synthetic
                                                                                                                                                                                            human; hepatocyte; proliferation; human hepatocyte transplantation; immunodeficient hepatopathy; liver; PCR; primer; 88.
                                                                                                                                                                                                                                                            Human hepatocyte related PCR primer R SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                  ADK70924 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19
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                                                                                  WO2003080821-A1
                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                           06-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HOOD/) HOOD L E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               428 TTTTATTTTATTTTTTT 445
|||||||||||||| |||
19 TTTTATTTTATTTTATTT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.7%;
I Similarity 94.4%;
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 16 A;
                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00309335
95US-00531241
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; 0
                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 16.4; DB 1;
Pred. No. 1.6e+03;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
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ADP26951/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   described: (1) a chimera mouse having transplanted human hepatocytes in the liver; (2) a method of obtaining human hepatocytes by separating the human hepatocytes from the liver of the chimera mouse; (3) the human hepatocytes obtained; (4) a cell kit containing the human hepatocytes; and (5) a hybrid artificial liver in which human hepatocytes are filled. The method can be used as a human hepatocytes proliferation method for producing an artificial liver in which human hepatocytes are filled. The present sequence represents a PCR primer which is used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mukaidani C,
                                                                                                                                                                                                                                                                                 hair growth modulator; P-cadherin modulator; endocrine; depilatory; gene therapy; antisense therapy; hair growth; alopecia; baldness; unwanted hair growth; hirsutism; hypotrichosis associated with juvenile macular dystrophy; HJMD; hum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       comprising transplanting human hepatocytes into a mouse suffering from immunodeficient hepatopathy and feeding this mouse in a state protected from attack from a human complement produced by the human complement to proliferate the transplanted human hepatocytes in the mouse liver. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proliferating human hepatocytes for producing an artificial liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-203365/19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2002; 2002JP-00084280
WPI; 2004-469945/45
                                                                                                                                                                                                                                                                                                                                                           Human P-cadherin PCR primer SEQ ID NO:52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; SEQ ID NO 2; 73pp; Japanese.
                           Sprecher E,
                                                                                                                                                                                              EP1428893-A2
                                                                                                                                                                                                                                                                                                                                                                                         26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADP26951 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a human hepatocyte proliferation method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NISC-) JAPAN SCI & TECHNOLOGY CORP (HIRO-) HIROSHIMA IND PROMOTION ORG
                                                                                                    15-OCT-2002; 2002US-0418163P
                                                                                                                                 10-OCT-2003; 2003EP-00256411
                                                                                                                                                               16-JUN-2004.
                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                     P-cadherin; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        535 CTCCTGCCTCAGCCTCCC 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 Similarity
17; Conserv
                                                          SPRECHER E.
BERGMAN R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCTGCCTCAGTCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 5 A; 3 C; 10 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention.
                          Bergman
                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yoshizato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.7%;
                                                                                                                                                                                                                                                                     88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                   juvenile macular dystrophy; HJMD; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.4;
No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .6e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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Identifying a hair growth modulator for treating alopecia and unwanted hair growth such as hirsutism, comprises identifying a P-cadherin modulator and testing whether the P-cadherin modulator is functional as
                                                                                                                                                                      hair growth modulator
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Example; SEQ ID NO 52; 121pp; English.

The present invention describes a method (M1) for identifying a hair comprises identifying a P-cadherin modulator, and testing whether the P-cadherin modulator is functional as a hair growth commodulator. Also described: (1) a hair growth modulator (1) identified by (M1); and (2) a composition (II) for modulating hair growth, comprising, as an active ingredient, a P-cadherin modulator functional as a hair composition (II) have endocrine and depilatory activities, and can be used as hair growth modulators, P-cadherin function composition, and in gene and antisense therapy. (M1) is useful for modulators, and in gene and antisense therapy. (M1) is useful for confidentifying a hair growth modulator. (I) is useful in a method of medical treatment. (I) or (II) is useful for modulating hair growth for noncetterapeutic cosmetic purposes which involves administering to a subject, (I) or (II). (I) can be used in the manufacture of a medicament for the therapeutic modulation of hair growth. (I) or (II) is useful for treating (II) comprising P-cadherin inducer is useful for correction of hair loss in congenital hypotrichosis associated with juvenile macular dystrophy (HJMD) and other alopecia patients. The present sequence represents a PCR primer human P-cadherin, which is used in an example from the present convention.

Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

S Query Match Best Local S Matches 17 930 TCTCACTCTGTTACCCAG 947 l Similarity 17; Conserv Conservative 1.7%; 0 Score 16.4; Pred. No. 1 Mismatches .6e+03; DB 1; Length 19; Indels 0 Gaps 0

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18

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AAQ95565 standard; DNA; 20

14-FEB-1996 (first entry

Primer A7 (Group 4, set C) for a human chromosomal marker.

primer; polymerase chain reaction; PCR; linkage study; locus; microsatellite marker sequence; automated genotyping; allele; polymorphism; detection; Homo sapiens; ss.

Synthetic.

08-JUN-1995

WO9515400-A1

05-DEC-1994; 94WO-US013945.

03-DEC-1993; 93US-00160837

(UYJO) UNIV JOHNS HOPKINS

WPI; 1995-215278/28.

RESULT 1623
AA095565
ID AA09556
XX AA09556
AC AAQ9556
XX Primer
XX Primer
XX Primer
XX Primer
XX Polymoz
XX Mojelse
XX Mojelse
XX Mojelse
XX WO95154
XX WO95154
XX PD 08-UUNXX PD 08-UUNXX PD 08-UNXX PD 08-UN-Kit for automated genotyping contg. pairs of PCR primers - amplify polymorphic nucleotide repeat sequences, arranged i with a characteristic fluorescence label, useful e.g. in de arranged in e.g. in dete designed to

disease

related

genetic 70-2;

rearrangement

Fig

104pp;

English.

0

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AAQ95680

AC AAQ9

AC ACA9

AC AAQ9

AC ACA9

AC ACA9

AC AAQ9

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polymorphic, simple sequence repeats and can be used in automated genotyping. esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (ie. a difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 4 primer pairs are shown in hAQ9545-480 and hAQ95559-590. The chromosomal markers, published size range of the allele and degree of heterozygosity in the population for the markers covered by these primer pairs are not given in the sneaffication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The method aims to provide a collection of highly reproducible microsatellite marker sequences (MMS) at approx. 10-50 cM into throughout the human genome which can be detectably labelled.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                     The method aims to provide a collection of highly reproducible microsatellite marker sequences (MMS) at approx. 10-50 cM intervathroughout the human genome which can be detectably labelled. The polymorphic, simple sequence repeats and can be used in automated
                                                                                                                                                                                                                            Kit for automated genotyping contg. pairs of PCR primers - de amplify polymorphic nucleotide repeat sequences, arranged in with a characteristic fluorescence label, useful e.g. in dete
                                                                                                                                                                                                                                                                                                                                WPI; 1995-215278/28
                                                                                                                                                                                                                                                                                                                                                                                  Levitt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JUN-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9515400-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     microsatellite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer; polymerase chain reaction; PCR; linkage study;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Primer B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ95680
     genotyping.
                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYJO ) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                          related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGAGTTTCTCCATGTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAATTTCTCCATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                        Fig 7F-3; 104pp;
       simple sequence repeats and esp. fluorescence-based. The
                                                                                                                                                                                                                                                                                                                                                                                                                                    JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             marker sequence; automated detection; Homo sapiens; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93US-00160837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94WO-US013945
                                                                                                                                                                                                       genetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               set C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                          rearrangement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 16.4;
                                                                                                                                                     English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D8S265,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
     primers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genotyping; allele,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chromosome
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          correspond to the unique
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                    detection
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                                                                              intervals
                                                                                                                                                                                                                                                                                    designed
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                                                                                                                                                                                                                                                         sets each
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                                                            MMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MMS
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Sequence 20

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1625
AAH91108/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (le. a difference in the number of repeats) between individuals, the markers car be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 6 primer pairs are shown in AAQ95639-686. The published size range of the D8S265 allele is 284-307 bp, and the degree of heterozygosity in the population is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis single nucleotide polymorphism; SNP; chromosome 19p13; paternity test; chromosome 5q31-33; forensic test; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 3
                          The present invention describes a method for detecting the presence polymorphisms associated with inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. The methods can be used to d the presence of genetic polymorphisms associated with inflammatory b disease and correlating their occurrence with disease states. They used in this way for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis. The present sequence is a polymorphic site described in the exemplification of the invention
                                                                                                                                                                       Testing for the present bowel disease, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human inflammatory bowel disease associated polymorphic site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH91108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH91108
                                                                                                                                               Claim 1; Page 46; 463pp; English
                                                                                                                                                                                                                                            Daly M,
                                                                                                                                                                                                                                                                                                               10-DEC-1999; 99US-0170257P.
10-APR-2000; 2000US-0196046P.
                                                                                                                                                                                                                                                                                                                                                       11-DEC-2000; 2000WO-US033632
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                                                                                                                                                                                                                                                                                                                                                                                                              WO200142511-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                       (WHED )
                                                                                                                                                                                                                                                                         (ELLI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
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                                                                                                                                                                        for the presence of polymorphisms associated isease, using a hybridization assay.
                                                                                                                                                                                                                                                                       WHITEHEAD INST BIOMEDICAL ELLIPSIS BIOTHERAPEUTICS
                                                                                                                                                                                                                                              Hudson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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Length

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RESULT 1626
ABL45527/c
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                                                                                                                                                      The present invention describes a method of arraying genome clones. The comptises: (a) clones of the genomic libraries contained in compliked plates numbered for discrimination are mixed in each of the compliked plates; (b) a primer designed based on the chromosome marker complified product to specify the marker is detected from the resultant complified product to specify the discrimination Nos. of the multiwell complified product to specify the discrimination Nos. of the multiwell complified product to specify the discrimination Nos. of the multiwell complified product to specify the discrimination Nos. of the multiwell complified product to specify the discrimination Nos. succeed to the maximum in the specified discrimination Nos. to succeed to the maximum in the specified discrimination Nos. to array the multiwell complates; (e) the clones in the multiwell plates of the specified condiscrimination Nos. are mixed respectively in each wells of longitudinal complates; (e) the clones are specified by using the above primer; (g) signals complated and the specified from the detected result; and (i) the clones are multiwell plates are specified from the detected result; and (i) the clones are constituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL4957 to ABL45322 represent pCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
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Best Local Similarity
Matches 17; Conserv
                                                                Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human chromosome
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                                                                                                                               Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 6; Page 56; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Arraying genome clones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-MAR-2001; 2001JP-00068285
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                  ACAGCTCACTGCAGCCTT
 ACAGCTCACTGCAGCTTT
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                                                                Conservative
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                                                                             1.7%;
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Pred. No. 1.6e
0; Mismatches
                                                                               Score 16.4;
Pred. No. 1.
                                                                Mismatches
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L.6e+03;
                                                                               DB 1; Length 20;
.6e+03;
                                                                  Indels
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RESULT 1628
ABZ71060/c
ID ABZ7106
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ACC55322/c
22XBXBXXX
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                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                The invention relates to a novel method for identifying subjects at risk of developing thrombotic thrombocytopenic purpura (TTP) disease, comprising providing nucleic acid having a disintegrin and metalloproteinase containing thrombospondin 1-like domains 13 (ADAMTS13) gene from a subject, and detecting the presence or absence of one or more variations in the ADAMTS13 gene. The method of the invention has thrombolytic and haemostatic activity. The methods and compositions of the present invention are useful for the diagnosis and treatment of, and/or analysing risks for thrombotic thrombocytopenic purpura. The present sequence is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying risk of developing thrombotic thrombocytopenic purpura disease, using a novel disintegrin and metalloproteinase containing thrombospondin 1-like domains genes and proteases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; thrombotic thrombocytopenic purpura; TTP; disintegrin; metalloproteinase; thrombospondin 1-like domains 13; ADAWTS13; thrombolytic; haemostatic; PCR; primer; RT-PCR; 5' RACE; 3' RACE; se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human ADAMTS13
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                                                                                                                                                                                                                                                                                          Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 87; 98pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ginsburg D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-AUG-2001;
16-AUG-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC55322;
                                   Human HKR1 phosphorothioate antisense oligonucleotide SEQ ID
                                                                                         ABZ71060
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                                                                                                                                                                                                              967
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                                                                                                                                                                                                   ATCTCGGCTCACTGCAAC 984
                                                                                                                    standard;
                                                                                                                                                                                                                                        Conservative
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2002US-00312834.
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                                                                                                                  DNA;
                                                                                                                                                                                                                                                  94.4%;
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Pred. No. 1.
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                                      NO:88
                                                                                                                                                                                                                                       Gaps
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Human; HKR1; cytostatic; HKR1 inhibitor; hyperproliferative disorder; cancer; antisense oligonucleotide; 2'-0-methoxyethyl; 2'-MOE; control;

phosphorothioate;

88

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                                                                                                                                                                                                             The present invention describes a compound 8-50 nucleobases in length cargeted to, and which specifically hybridises with a nucleic acid completule encoding HKR1, and inhibits the expression of HKR1. Also cestified (1) a compound 8-50 nucleobases in length that specifically comporibed; (1) a compound 8-50 nucleobase portion of an active site on a curie acid molecule encoding HKR1; (2) a composition comprising the compound and a carrier or diluent; (3) a method for inhibiting the compound and a carrier or diluent; (3) a method for inhibiting the compound and the compound so that expression of HKR1 is inhibited; and (4) a curie with the compound so that expression of HKR1 is inhibited; and (4) a curie with HKR1 by administering to the animal a therapeutic or prophylactic amount of the compound so that expression of HKR1 is inhibited. HKR1 can insense oligonucleotides have cytostatic activities and can be used as CHKR1 inhibitors. The compound, composition and methods are useful for treating a disease or condition associated with HKR1, such as a composition of HKR1 inhibitors. The compound, composition and methods are useful for treating a disease or condition associated with HKR1, such as a composition of HKR1 inhibitors for modulating the expression of HKR1. They are also useful in research and composition shows the expression of HKR1. The present sequence continuenting the expression of HKR1. The present sequence continuenting the useful of the present sequence continuenting the useful of the inhibition of human HKR1 in an antisense continuenting the useful in the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR1 in an example from the inhibition of human HKR
                                                                                               Query Match
Best Local 9
                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding HKR1, useful for treating a disease/condition associated with HKR1, such as hyperproliferative disorder, e.g. lung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 brain or breast cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JUL-2001; 2001US-00898556
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                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                  present invention
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20
                                                                                                 Similarity
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                                      GAGTAGCTGGGACTACAG 745
                                                                                                                                                          BP; 4 A;
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16. .20
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/mod_base= OTHER
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                                                                                                 1.7%;
                                                                                                                                                            6 C; 3 G;
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                                                                                                   Score 16.4;
Pred. No. 1.
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                                                                                  Mismatches
                                                                                                     .6e+03
                                                                                                                        DB 1;
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RESULT 1630 ADE15817/c ID ADE1581

ADE15817

standard; DNA; 20

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ABT44200,
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                                                                                                                                                                                      Critically hybridise to and inhibit the expression of the nucleotides that compounds oligonucleotide domain 1, NOD1 protein. NOD1, also known as CARD4 (Caspase associated recruitment domain 4) is a domain that is involved in the elimination of cells via programmed cell death and in the host compounds of the administration of cells via programmed cell death and in the host compounds of the administration of cells via programmed cell death and in the host compounds of the administration of cells via programmed cell death and in the host compounds of the administration of cells of the cell death and in the host compounds of the contribute of the development of the conditions including compounds of the contribute to the development of cancer, autoimmune disorders and contribute to the development of cancer, autoimmune disorders and contribute to the development of cancer, autoimmune disorders and conjugurations. The present invention describes antisense coligonucleotides that can modulate NOD1 expression (and variants coligonucleotide sequence is the compounds, via gene therapy, can be used to creat various human diseases caused by aberrant apoptosis. This coligonucleotide sequence is the chimeric antisense oligo used to inhibit compounds. The nucleotide contribute of the invention. Note that it has two compounds. The aim of the invention state that it has two compounds.
밁
                                                                   Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   caspase associated recruitment domain 4; programmed cell death; cancer; apoptosis; Alzheimer's; neurodegenerative; Parkinson's; ALS; NOD1; CARD4; amyotrophic lateral sclerosis; retinitis pigmentosa; autoimmune disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New compound, comprising a sequence targeted to a nucleic acid encoding nucleotide-binding oligomerization domain 1 (NOD1), useful for preparing a composition for treating hyperproliferative disease, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABT44200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABT44200 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2002; 2002WO-US038606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    viral infection; human; chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimeric antisense oligonucleotide ISIS 199196 to
                                                                                                                                         Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; Page 76; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-577293/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-DEC-2001; 2001US-00006883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003050246-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chimeric - Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense; nucleotide binding oligonucleotide
                              1019 CAGCCTCCCAAGCAGCTG
18
                                                                     1 Similarity
17; Conserv
 CTGCCTCCCAAGCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roach MP;
                                                                       Conservative
                                                                                                                                           BP; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
                                                                                                                                           A; 4 C; 9
                                                                                    1.7%;
                                   1036
   _
                                                                   Score 16.4; I pred. No. 1.6e 
0; Mismatches
                                                                       0
                                                                                                                                             G; 3 T; 0
                                                                                                                                             ς,
                                                                                                                                               0 Other
                                                                                        6e+03;
                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               domain 1;
                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inhibit human NOD1.
                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
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                                                                         Gaps
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Best Local S
Matches 17
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2'-5' phosphodiesterase; hepatitis C; virucide; hepatotropic;
gene therapy; vaccine; human.
                                                                                                                                                                                                                                                                                                                                                         and hepatotropic activity. A polynucleotide of the invention may have a use in gene therapy, or in a vaccine. The compound capable of modulating the level of activity of the OAS, RNase L or 2'-5' phosphodiesterase gene and/or activity of the OAS, RNase L or 2'-5' phosphodiesterase protein is useful in the manufacture of a medicament for treating a patient with or at risk of hepatitis C infection. The nucleic acid that hybridises selectively to OAS nucleic acid is useful in the manufacture of a medicament or diagnostic reagent for treating or diagnosting a patient with or at risk of hepatitis C infection. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of a compound capable of modulating the level of activity of the OAS, RNase L or 2'-5' phosphodiesterase gene or protein in the manufacture of a medicament for treating a patient with or at risk of hepatitis C
Human; antisense; lung dysfunction; nasal airway dysfunction;
                                                               17-OCT-2003
                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel compound capable of modulating to factivity of the 2',5'-oligoademylate synthetase (OAS), RNase I 5' phosphodlesterase gene or protein, useful in the manufacture medicament for treating a patient with or at risk of hepatitis C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-APR-2002; 2002GB-00008928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PKR exon 17 PCR primer PK17A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE15817;
                             Human PDE4C oligonucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-APR-2003; 2003WO-GB001625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003089003-A1
                                                                                                                           ABZ99052 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infection, where the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA). The method of the invention has virucide
                                                                                                                                                                                                                                      946 AGGCTGGAGTGCAATGGC
                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IMPERIAL COLLEGE INNOVATIONS LTD.
                                                                                                                                                                                                        AGGCTGGAGTGCAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thursz M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 43;
                                                                                                                                                                                                                                                                   ilarity 94.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                             (first entry)
                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67pp; English.
                                                                                                                           20
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                                                                                                                           ВP
                                                                                                                                                                                                       w
                                                                                                                                                                                                                                      963
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                                                                                                                                                                                                                                                                                   Score 16.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                   1.6e+03
                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the level
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of a
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                    0;
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RESULT 1632
ABD3208
ID ABD3208
XX ABD3208
XC ABD3208

ABD32083

standard;

DNA;

29-JUL-2004

(first entry)

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

Human PDE4C-derived oligonucleotide SEQ ID 14294.

吊 S

Matches Query Match Best Local

17;

Similarity

1.7%; 94.4%;

Score 16.4; DB 1; Length 20; Pred. No. 1.6e+03;

0;

Mismatches

Indels

<u>,</u>

Gaps

0

614

TTTTTTGAGACAGAGTCT 631 Conservative

18

Sequence 20 BP; 3 A; 2 C; 5 G; 10 T; 0 U; 0 Other;

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CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antinflammatory steroid and ubiquinone. A composition of the invention CC has antinflammatory, antiallergic, antiasthmatic, hypotensive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antinflammatory steroid in a subject, for reducing or depleting levels of an CC of, or reducing sensitivity to adenosine, reducing levels of adenosine CC receptor, producing bronchodilation, increasing levels of adenosine CC lung surfactant in a subject's tissue, or treating bronchoconstriction. CC lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed constriction, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene t antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    initiation 5' and 3' i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   respiration, h corresponding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-229219/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-APR-2001; 2001US-0286137P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200285308-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-)
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             active agent comprising an oligonucleotide antisense to the ation codon, coding region, 5' or 3' end genomic flanking regions, d 3' intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EPIGENESIS PHARM INC
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, Tang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NO 14294; 872pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pharmaceutical
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  composition,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aguilar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      which has a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                allergy;
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cc expression of a target polypeptide associated with lung airway or lung cysfunction or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery CC device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition CC of the invention has antiallergic, antialfammatory, antiasthmatic, CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a CC treating a respiratory, lung or malignant disease. The administered CC composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to correct the administered CC uniformation, allergies and/or bronchoconstriction and/or lung CC inflammation, allergies and/or bronchoconstriction and/or lung CC inflammation, allergies, asthma, impeded respiration, respiratory hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary the reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system cc e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effect due to it
                                                                                                                       Matches
                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) recept surfactant depletion or hyposecretion, when administered to a mammal oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
analgesic; hypotensive; immunosuppressive; cytostattic; cystic fibrosis;
beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
respiratory distress syndrome; allergic rhinitis; pulmonary hyportension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-APR-2001; 2001US-0286036P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel composition (a) a first active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            respiratory tract inflammation; adenosine sensitivity; lung; cancer;
                                                                                                                       l Similarity
17; Conser
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Tang
                                                          TTTTTGAGACAGAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 14294; 763pp; English
TTTTGAGACAGTGTCT 18
                                                                                                                                                                                                                                                                                                        brain, heart, kid
                                                                                                                       Conservative
                                                                                                                                                                                                                                              3 A;
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                                                                                                                                                                                                                                              2 C;
                                                                                                                                                    1.7%;
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                                                                                                                                                                                                                                              G; 10 T;
                                                                                                                                                                                                                                                                                                        due
                                                                                                                                                 Score 16.4;
Pred. No. 1.
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                                                                                                                             Mismatches
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to it
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                                                                                                                                                 1.6e+03
                                                                                                                                                                                    DB 1; Length 20;
                                                                                                                                                                                                                                                  0 Other;
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                                                                                                                             Indels
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RESULT 1634 ADI38842/c ID ADI3884 XX

ADI38842 standard; DNA; 20

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RESULT 1633
ADH56987/c
ID ADH5698
XX ADH5698
                                                                                                                                                                                                                                                                                   This invention relates to novel single nucleotide polymorphisms within Cthe human CARD4 gene. Specifically, it refers to allelic variants of CC CARD4 (NOD1), a member of the CED4/Apaf-1 family that is involved in CC caspase-9 induced apoptosis and inflammation. The present invention CC describes a kit for determining the allelic variants of CARD4 polymorphic CC regions of an individual, which can be useful for predicting CC susceptibility, as well as diagnosis, prevention and treatment of various disorders including chronic obstructive pulmonary disease, rheumatoid CC arthritis, inflammatory bowel disease, psoriasis or asthma. Accordingly, CC the compositions of this invention exhibit antiasthmatic, antiinflammatory and antiallergic activities. Purthermore, they may be used to identify patients that would be strong candidates for effective creatment with a CARD4 modulator, in pharmacogenomics, or in monitoring Ct the effects of CARD4 therapeutics during clinical trials. The nucleic carid molecule may also be used in forensics or paternity testing. This coligonucleotide sequence is a PCR primer used to amplify a human CARD4 DNA oligo comprising an allelic variant of the invention.
                                                                                                   Matches
                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid molecule comprising CARD4 gene, useful for diagnosing, preventing apoptotic, inflammatory or allergic disorder,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Barnes G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-2002; 2002US-0368184P
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                                                                                                                                                                                                                                      Sequence 20
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(BERT/) BERTIN
                                                                                                                                                Local
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                                                                                                                1 Similarity
17; Conserv
                                                            CAGCCTCCCAAGCAGCTG 1036
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                                                                                                                                                                                                                                         BP; 3 A; 4 C; 9 G; 4 T; 0 U;
                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                94.4%;
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                                                                                                                         Mismatches
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Matches 17
                                                                                                                                   The invention describes a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding LIM domain kinase 1. The compound specifically hybridises with the nucleic acid molecule encoding LIM domain kinase 1 and inhibits the expression of LIM domain kinase 1. It specifically hybridises with at least an 8-nucleobase portion of a preferred target region on the nucleic acid molecule encoding LIM domain kinase 1. The antisense oligonucleotide is useful for modulating the expression of LIM domain kinase 1 in cells or tissues to treat diseases associated with their expression, such as a developmental disorder or a neurological disorder. In addition, the compound is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence represents a human LIM domain kinase 1 antisense oligonucleotide.
                                                                                                             Sequence 20
                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides for modulating LIM domain kinase 1 expression, useful for diagnosing, preventing or treating conditions associated with the kinase, e.g. neurological or developmental disorders.
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                                                     1 Similarity
17; Conserv
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                         CTGCCTCCCGGGTTCAAG 704
                                                                                                          BP; 5
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                                                      Conservative
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/mod_base= OTHER
/mod_base= OTHER
/note= "OTHER= 2'.-O-Methoxyethyl (2'-MOE)
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                                                                                                           A; 5 C; 7 G; 3 T; 0 U; 0 Other;
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                                                                  Score 16.4; DB 1;
Pred. No. 1.6e+03;
                                                      Mismatches
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RESULT 1635 ADI38784 ID ADI3878

ADI38784 standard; DNA; 20

BP

RESULT 1636 ADJ60937

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                                                                  Query Match
Best Local Similarity
                                                                                                                                                     The invention describes a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding LIM domain kinase 1. The compound specifically hybridises with the nucleic acid molecule encoding LIM domain kinase 1 and inhibits the expression of LIM domain kinase 1. It specifically hybridises with at least an 8-nucleobase portion of a preferred target region on the nucleic acid molecule encoding LIM domain kinase 1. The antisense oligonucleotide is useful for modulating the expression of LIM domain kinase 1 in cells or tissues to treat diseases associated with their expression, such as a developmental disorder or a neurological disorder. In addition, the compound is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence represents a
                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating LIM domain kinase 1 expression, useful for diagnosing, preventing or treating conditions associated with the kinase, e.g. neurological or developmental disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neuroprotective; LIM domain kinase 1; developmental disorder; neurological disorder; diagnostic; prophylaxis; human; ss.
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                                                                                                              Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 83; 81pp; English.
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                                                                                                                                           human LIM domain kinase 1 antisense
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CTGCCTCTCGGGTTCAAG
                         CTGCCTCCCGGGTTCAAG 704
                                                       Conservative
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are 5-methylcytidines"
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                                                                     94.4%;
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                                                                     Score 16.4; DB 1;
Pred. No. 1.6e+03;
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                                                         Mismatches
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                                                                                    DB 1;
                                                                                 Length
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RESULT 1637
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          airway inflammation; allergy; asthma; impeded respiration; cystic fibrosis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
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ADM15371
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      01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                  Sequence
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inflammation; allergy; asthma; impeded respiration;
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                                                                                                                                                                                                                                                                   l Similarity
17; Conserv
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Pred. No. 1.
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                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             represents an oligonucleotide
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                                                                                                                                                                                                                                                                                        6e+03
                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Miller
                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                  of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e.g.,
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immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1; inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; antiinflammatory; neuroprotective; antiarthritic; vasotropic; ophthalmological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                               08-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
(PHAA ) PHARMACIA CORP
                                                     25-SEP-2002; 2002US-0413549P
                                                                                                         25-SEP-2003;
                                                                                                                                                                                                                    WO2004028458-A2
                                                                                                                                                                                                                                                                                                                                                       modified_base
                                                                                                           2003WO-US030374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "phosphorothioate linkages
residues are 5-methyloytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                             16. .20
                                                                                                                                                                                                                                                                                                                                                                                      /note=
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/mod_base= OTHER
                                                                                                                                                                                                                                                                             note=
                                                                                                                                                                                                                                                                             _base= OTHER
== "2'-O-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                         "2'-O-methocyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 all cytidine
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New antisense compound, having a sequence targeted to a nucleic avencoding mPGES-1, useful for preparing a composition for treating inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia acid e.g.,

Gierse

WPI; 2004-305094/28.

Claim 4; SEQ ID NO 1558; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9934.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of thibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antisense oligonucleotides and antisense compounds have cytostatic, antisense oligonucleotides, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic ophthalmological, immunomodulatory and cardiovascular activities, and cophitalmological, immunomodulatory and cardiovascular activities, and cophitalmological, inhibitors and in gene therapy. The antisense compoundant of the preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, ophthalmic, immunological, cardiovascular or neurological disorder. antisense compound vasotropic, ties, and ca

Sequence 20

BP; 4 A;

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Ç 4 G;

4 T;

0 U;

0 Other;

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The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (II)-4 receptor, interleukin (II)-5 receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the prevention and/or treatment of a respiratory or lung disease. The oligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; alivay inflammation; allergy; impeded respiration; cystic fibrosis; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                         Novel single or multiple target oligonucleotide anti-sense to e.g. Conitiation codon, intron of respiratory disease-relevant gene e.g. CORANTES, MCP4, useful for prophylaxis or treating respiratory disease
                                                                                                                                                                                                                                                                                                                                 Nyce JW, Sa
Shahabuddin
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23-APR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NYCE/)
                                                                                                                                                                                                                                                                                                                                                                                                                          MILL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                       AGUI/)
                                                                                                                                                                                                                                                                                                                                                                                                          SHAH/)
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17; Conserv
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MILLER S.
SHAHABUDDIN
                                                                                                                                                                                                                                                                                                                                                                             CONG H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SANDRASAGRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NYCE J W.
                                                                                                                                                                                               SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
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                                                                                                                                                                                                                                                                                                                               Sandrasagra A, Ta
in S, Lu H, Cong
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2002WO-US013143.
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                                                                                                                                                                                               NO 1793; 174pp; English.
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ong H;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .6e+03;
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se e.g.
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88888888888888
                                                                                                                                                tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(s), and/or asthma and/or lung allergies associated with inflammation or an inflammatory disease. The respiratory or lung disease is chosen from airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
                                                                        allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the
Sequence
20
BP; 3
ð
2 C; 5
G; 10 T; 0 U;
0 Other;
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Matches
                                    Query Match
Best Local
              614
                            1 Similarity
\vdash
        TTTTTTGAGACAGAGTCT
TTTTTTGAGACAGTGTCT
                             Conservative
                                   1.78;
18
             631
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                                    Score 16.4;
Pred. No. 1.
                              Mismatches
                                    1.6e+03;
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                              Indels
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RESULT 1639
ADP4584
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ADP4584
XX
AC ADP4584
AC A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Extend primer 38 used to genotype human ICAM-1/ICAM-4/ICAM-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-AUG-2004
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25-NOV-2002; 24-JUL-2003; 25-NOV-2003; 2003WO-US037948. 2002US-0429136P. 2003US-0490234P.

Nelson MR, Braun Þ Kammerer SM, Reneland Ø

2004-441051/41.

(SEQU-)

SEQUENOM INC

Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample subject.

Example 4; Page 83; 289pp; English

The invention relates to a novel method for identifying a subject at ri of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a subject at risk of breast cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The current sequence is that of an Extend primer of fi

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ADPS 6753

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Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the invention which was used to genotype human intercellular adhesion molecule ICAM-1/ICAM-4/ICAM-5 gDNA. ICAM-1 (human rhimovirus receptor;BB2 ;CD54;cell surface glycoprotein p3.58) has been mapped to chromosomal position 19p13.3-p13.2; ICAM-4 (Landsteiner-wiener blood group;LW) has been mapped to chromosomal position 19p13.2-cen and ICAM-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alpha-methylacyl-CoA racemase; AMACR; fat gene therapy; antisense; 2'-methoxyethyl phosphorothioate backbone; ss; human.
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                                                       The invention relates to a novel compound having a sequence comprising 8-80 bp which is targeted to a nucleic acid encoding alpha-methylacyl-CoA racemase (AMACR), specifically hybridises with the nucleic acid encoding alpha-methylacyl-CoA racemase and inhibits the expression of alpha-methylacyl-CoA racemase and inhibits the expression of alpha-methylacyl-CoA racemase. The oligonucleotide compound of the invention may be useful for preparing a composition for treating a disease or condition involving defects in fatty acid metabolism, possibly via gene therapy. The current sequence is that of a antisense 2'-methoxyethyl (2'-MOE) gapmer oligo of the invention which was targeted to human AMACR RNA.
                                                                                                                                                                                                                                                                                                                                                                                       New oligonucleotide compound that inhibits expression of alpha-methylacyl-COA racemase, useful for preparing a composition for treating a condition involving defects in fatty acid metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense 2'-MOE gapmer targeted to human AMACR RNA -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-2004
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                                                                                                                                                                                                                                                                                                                                     Example 15;
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17; Conserv
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ilarity 94.4%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod base= OTHER
/not== "OTHER = Bases 1-5 and 16-20 are 2'-methoxyethyl(2'-MOE) bases, all cytidines are 5'-methylcytidines, phosphorothioate backbone throughout"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                     24; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 16.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gapmer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            metabolism;
2'-MOE wing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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                                                             yethyl (2'-
AMACR RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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Sequence 20

BP; 4 A;

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RESULT 1641
ADP56830/c
ID ADP5683
XX ADP5683
XX ADP5683
XX O9-SEP-
XX 'alpha-1
XX 'ISIS-
XX 
RESULT 1642
AAF88161/c
ID AAF8816
XX
AC AAF8816
XX
AC AAF8816
XX
AT AF8816
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel compound having a sequence comprising 8. 80 bp which is targeted to a nucleic acid encoding alpha-methylacyl-CoA racemase (AMACR), specifically hybridises with the nucleic acid encoding alpha-methylacyl-CoA racemase and inhibits the expression of alphamethylacyl-CoA racemase. The oligonucleotide compound of the invention may be useful for preparing a composition for treating a disease or condition involving defects in fatty acid metabolism, possibly via gene therapy. The current sequence is that of a human AMACR DNA of the
                                                                                           3161/c
AAF88161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New oligonucleotide compound that inhibits expression of alpha-methylacyl-COA racemase, useful for preparing a composition for treating a condition involving defects in fatty acid metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alpha-methylacyl-CoA racemase; AMACR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADP56830 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-DEC-2002; 2002US-00316540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-DEC-2003; 2003WO-US039230
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  17-JUL-2001
                                                 AAF88161;
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 101; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-468694/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention which was targeted for antisense therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184 AGATGGAGTTTCTCCATG
                                                                                                                                                                                                                                                      184 AGATGGAGTTTCTCCATG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AMACR
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                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                              standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                      BP;
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    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     targeted for antisense therapy -
                                                                                                                                                                                                                                                                                                                                                                                                        P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                1.7%;
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                                                                                                ВP
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                              Score 16.4; DB 1,
                                                                                                                                                                                                                                                                                                               Pred. No. 1.6
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
                                                                                                                                                                                                                                                                                                                                                            DB 1;
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RESULT 1643
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel nucleic acid (N1) encoding a polypeptide which comprises a KRAB-domain and/or at least one zinc finger motif. The products of the invention have cytostatic and antithyroid activity and can be used in gene therapy. Nucleic acids, polypeptides, and antibodies of the invention may be used in the diagnosis and/or the therapy of the malfunction of the thyroid and/or hyperlasis of the thyroid and/or thyroid tumors. They may also be used in the production of medicaments. (N1) can also be used to diagnose thyroid tumors which are located on chromosome 19 at band 19q13. This sequence represents a PCR primer used in the isolation of the thyroid malfunction-associated protein, RITA
                                        Human; 88; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR; cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF; addrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR112; aryl hydrocarbon receptor nuclear translocator; ARNT; cattepsin S; CTSS; cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological; epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP; glutathione-S-transferase; SFHX2; S-lipoxygenase activating protein; FLAP; HNWT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNWT; NADPH quinone oxidoreductase 2; NOO2; sulfotransferase thermolabile; STM; UDP-glucuronosyl transferase 2B7;
                                                                                                                                                                                                                                                                                                                                    ABS97400 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 8; Page 29; 59pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disorders, e.g. tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-OCT-2000; 2000WO-DE003600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KRAB domain; hyperplasia; thyroid; tumor; zinc finger cytostatic; antithyroid; gene therapy; chromosome 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human thyroid malfunction-associated protein RITA PCR
                                                                                                                                                                                                                                Human cyclooxygenase 2 (COX2) PCR primer #13.
                                                                                                                                                                                                                                                                     23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-OCT-1999;
            UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYBR-) UNIV BREMEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 2 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                 (first entry)
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis and treatment of thyroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Le
1.5e+03;
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acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5; altered drug metabolism; cardiovascular function; colorectal tumour; central nervous system; pulmonary; immunological.
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Homo sapiens.

WO200257410-A2

28-NOV-2001; 2001WO-US044838.

28-NOV-2000; 2000US-00724389

WPI; 2002-698522/75

Isolated nucleic acid molecules having polymorphisms in known human gere.g. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

Example 8; Page 112; 714pp; English.

CC cytochrome P450 0ZE1 (CYPA500ZE1), adrenergic receptor betai (ABRI), CC caryl hydrocarbon (AHR), aryl hydrocarbon receptor betai (ABRI), CRISS), cycloxygenase 2 (CXXX), diazepam binding CC inhibitor (DB1), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating CC protein (FRAP), glutathione-S-transferase 2 (CXXX), histamine-N-methyl CC transferase (NNMT), (Kallikrein 2) KIKZ, nicotinamide -N-methyl CC transferase (NNMT), NADEH quinone oxidoreductase 2 (NQO2), CC transferase (NNMT), NADEH quinone oxidoreductase 2 (NQO2), CC transferase (NNMT), NADEH quinone oxidoreductase 2 (NQO2), CC transferase (UGT2B15), urckinase receptor (NPA), ultidrug resistance in CC (NDR1), lactotransferin (LTP), multidrug resistance associated protein 3 (CMPR1), cryptases and contained in CYP4501A, This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),

Sequence 16 BP; 4 A; N C; 7 G; 3 T; 0 U; 0 Other;

Ś Query Match Best Local S Matches 16 Local Similarity les 16; Conserv Conservative 100.0%; 0 Score 16; Pred. No. Mismatches DB 1; 1.5e+03 Length 16; 0, Gaps

밁

GGATTACAGGCGTGAG 16

ABS98039 standard;

DNA; 16

ВÞ

PCR primer #3.

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RESULT 1644
ABS98039/c
ID ABS9803
XX ABS9803
CC This invention relates to the sequence of an isolated nucleic acid CC molecule comprising at least one base variation from that of a known CC human cytochrome P450 A1 (CYP450HA1), cytochrome P450 A2 (CYP450HA1), caryl hydrocarbon receptor beta1 (ADBR1), CC cytochrome P450 (AHR), aryl hydrocarbon receptor nuclear translocator CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding CC inhibitor (BBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating CC protein (FNAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2), methyl CC (UGT2B4), UDP-glucuronosyl transferase 2B4 (CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B1), UDP-glucuronosyl (UGT2B1), unokinase receptor (UPA), multidrug resistance 1 (MRR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as CC genetic linkage markers for locating and characterising the genes that CC identifying the genes responsible for a variety of disorder-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               w rulman; ws; primer; cycontrolle Fabora; check of the cytochrome P450 A2; CYC04501A2; CYC04rome P450 OZE; CYC4500AE1; LTF; cytochrome P450 OZE; CYC4500AE1; LTF; was adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; wRP3; wR112; waryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; waryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; waryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; waryl hydrocarbon; FLAP; cycloxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological; we poxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP; cycloxyl kallikrein 2; KLKZ; historinamide-N-methyl transferase; whit; was allocatione oxidoreductase 12; GST12; historinamice-N-methyl transferase; whit; was allocatione oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM; was allocation by transferase 2B7; workinase receptor; what was activated protein 3; cancer; prostate; was multidrug resistance associated protein 3; cancer; prostate; multidrug resistance associated protein 3; cancer; prostate; was actylcholine muscarinic receptor; CHMR1; CLMR2; CHMR3; CHMR4; CHMR5; was actylcholine muscarinic receptor; cHMR1; chmR2; CHMR3; CHMR4; CHMR5; was actylcholine muscarinic receptor; chmR1; chmR2; CHMR3; CHMR4; CHMR5; was actylcholine muscarinic receptor; chmR1; chmR5; chmR3; chmR4; chmR5; c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human multidrug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-698522/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guida M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-NOV-2000; 2000US-00724389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-NOV-2001; 2001WO-US044838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200257410-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DNAS-) DNA SCI LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hall J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 141; 714pp; English.
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RESULT 1645
ACA62885/c
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeated nucleic acid detection method,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   traits as a result of their e.g., overexpression,
                                                                                                                                                                                                                                                                                                                                       Mandrekar MN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1999;
25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-DEC-2000; 2000US-00739909
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACA62885 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                             (MAND/) MANDREKAR M N
(TERE/) TEREBA A.
(SHUL/) SHULTZ J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nervous system function. The present sequence represents d to amplify the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 3 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9908-00383316
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                                                                                                                                                                                                                                                                                                                                          Shultz
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 16;
Pred. No.
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The invention describes a method of determining presence or absence of a desired nucleic acid (NA) that contains multiple repeats of a predetermined NA target sequence in a NA sample. The method involves providing a treated sample that may contain the desired NA in which several predetermined repeating NA target sequences are hybridised with a NA probe, analysing for presence of hybridised NA containing the NA probe, and thereby the presence or absence of the desired NA. The method probe, and thereby the presence or absence of the desired NA.

Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.

Claim 1; Page 27; 31pp; English.

WPI; 2003-479484/45.

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RESULT 1646
RCA62878
ID ACA6287
XX ACA6287
XX 21-AUG-
XX Repeate
XX Repeate
XX US20030
XX JS-DEC-
XX 15-DEC-
XX 21-JUL-
PR 21-JUL-
PR 25-AUG-
XX (MAND/)
PA (TERE/)
PA (SHUL/)
XX Mandrek
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PT multipl
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PT sample,
XX Claim :
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CC prodet
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           is useful for determining the presence or absence of desired nucleic acids that contain multiple repeats of a predetermined NA target sequence, in a NA sample obtained from a biological sample, where the repeated sequence includes several predetermined repeated sequence that differ in length and/or sequence. The methods can be efficiently used for distinguishing human and bacterial NA. The method is highly sensitive, and enables detection and quantification of the presence of a NA without the need to undergo a NA target sequence enrichment step prior to a NA hybrid detection step. The method enables rapid and accurate detection of a desired NA that contains multiple repeats of a NA target sequence. This
desired nucleic acid (NA) that contains multiple repeats of a predetermined NA target sequence in a NA sample. The method involves providing a treated sample that may contain the desired NA in which several predetermined repeating NA target sequences are hybridised with a NA probe, analysing for presence of hybridised NA containing the NA probe, and thereby the presence or absence of the desired NA. The method is useful for determining the presence or absence of desired nucleic acids that contain multiple repeats of a predetermined NA target sequence, in a NA sample obtained from a biological sample, where the repeated sequence includes several predetermined repeated sequence that differ in length and/or sequence. The methods can be efficiently used for distinguishing human and bacterial NA. The method is highly sensitive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Repeated nucleic acid detection; human; alu; probe; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACA62878
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence represents a probe used to detect the human Alu repeat sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACA62878 standard;
                                                                                                                                                                                                                                                                                                 Claim 1; Page 27; 31pp; English
                                                                                                                                                                                                                                                                                                                                                               Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mandrekar MN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-JUL-1999;
25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-DEC-2000; 2000US-00739909.
                                                                                                                                                                                                                                                            The invention describes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TERE/) TEREBA
(SHUL/) SHULTZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MAND/) MANDREKAR M N. (TERE/) TEREBA A.
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                                                                                                                                                                                                                                                                                                                                           by using nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tereba
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99US-00383316
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f
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             detection method,
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                                                                                                                                                                                                                                                        a method of determining presence or absence
                                                                                                                                                                                                                                                                                                                                           acid
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Pred. No.
                                                                                                                                                                                                                                                                                                                                           hybridization methods.
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1.5e+03;
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RESULT 1647
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        The invention describes a method of determining presence or absence of a CC desired nucleic acid (NA) that contains multiple repeats of a CC desired nucleic acid (NA) that contains multiple repeats of a CC predetermined NA target sequence in a NA sample. The method involves CC providing a treated sample that may contain the desired NA in which a several predetermined repeating NA target sequences are hybridised with a CC NA probe, analysing for presence of hybridised NA containing the NA CC is useful for determining the presence of the desired NA. The method cis useful for determining the presence or absence of the desired nucleic CC acids that contain multiple repeats of a predetermined NA target CC sequence, in a NA sample obtained from a biological sample, where the CC distinguishing human and bacterial NA. The method is ample, where that differ in length and/or sequence. The method is highly sensitive, CC and enables detection and quantification of the presence of a NA without the need to undergo a NA target sequence enrichment step prior to a NA contains multiple repeats of a NA target sequence. This desired NA that contains multiple repeats of a NA target sequence. This
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                                                                                                                                                                                                                                                                                                                                           Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.
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(TERE/)
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SHULTZ
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99US-00383316.
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25-AUG-1999;
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                                                                       Query Match
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25-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SHUL/) SHULTZ J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MAND/) MANDREKAR M N.
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                                                        16;
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                                                                        Similarity
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                             TCTCGGCTCACTGCAA 983
   TCTCGGCTCACTGCAA 16
                                                           Conservative
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99US-00383316.
                                                                        1.6%;
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                                                                          Score 16;
Pred. No.
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                                                                          DB 1; Length 16; 1.5e+03;
                                                                                                                                               a nd accurate detection of a NA target sequence. This human Alu repeat semience.
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                                                             Gaps
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RESULT 1650

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AAD63080/c

ID AAD63080 standard; DM
XX

AC AAD63080;

XX AAD63080;

XX I2-FEB-2004 (first of the content of th
RESULT 1651
AAD63081/c
ID AAD6308
XX AAD6308
XC AAD6308
XC AAD6308
C AAD6308
XX Tandem
XX Tandem
XX Tandem
XX Tandem
XX US20031
XX US20031
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention discloses a method for generating five prime biased tandem tag libraries of cDNNs. step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Generating five prime biased tandem tag libraries of cDNAs by isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags.
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                                                                                                                                                                                                                                     Human tandem tag
                                                                                                                                                                                                                                                                                                                                                                                                AAD63081 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 5; Opp; English.
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HOPPA N L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGCCTCCCAAAGTGC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCCTCCCAAAGTGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Li Y, Hermida
                                                                                                                                                                                     concatenated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence is human tandem tag DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 2 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                     DNA #15.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
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100.0%; Pred. No. 1.5e+03;
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                                                                                                                                                                               tag;
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                                                                                                                                                                                     human;
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RESULT 1652
AAD63078/c
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Best Local Sim
Matches 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16 BP; 3 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention discloses a method for generating five prime biased tandem tag libraries of cDNAs. The step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Samal B,
                                                                                                                                                                                     US2003190618-A1
                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                         Tandem tag; concatenated tag; human;
                                                                                                                                                                                                                                         Human tandem tag DNA #12.
                                                                                                                                                                                                                                                               12-FEB-2004
                                                                                                                                                                                                                                                                                 AAD63078;
                                                                                                                                                                                                                                                                                                  AAD63078
                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is human tandem tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 5; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    concatenated tags.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SAMA/)
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                                                      Samal
                                                                                 (HERM/)
                                                                                                                                                  06-MAR-2002; 2002US-00092885
                                                                                                                                                                    09-OCT-2003.
                                   WPI; 2003-831617/77.
                                                                                                            (SAMA/)
                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                  B
                                                                                                                                                                                                                                                                                                                                                           869 GATTACAGGCGTGAGC
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                                                                                                                                                                                                                                                                                                                                                 16
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JOHE K K.
                                                                      HERMIDA L C.
HOPPA N L.
JOHE K K.
                                                                                                            SAMAL B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SAMAL
                                                                                                                                                                                                                                                                                                                                                  GATTACAGGCGTGAGC
                                                                                                                                                                                                                                                                                                   standard;
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                                                     Li Y,
                                                                                                                                                                                                                                                                                                                                                                                  1.6%;
milarity 100.0%;
Conservative 0
                                                                                                                               2002US-00092885
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                                                     Hermida LC,
                                                                                                                                                                                                                                                                                                   DNA;
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Pred. No.
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                                                      즛
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Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the

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RESULT 1653
AAD63084/c
ID AAD6308
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Matches 16
Query Match
Best Local S
Matches 16
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                                                                The present invention discloses a method for generating five prime blased trandem tag libraries of cDNAs. The step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags. The present sequence is human tandem tag DNA
                                                                                                                                                                    Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tandem
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD63084 standard; DNA; 16
                                                                                                                                      Disclosure;
                                                                                                                                                           concatenated tags.
                                                                                                                                                                                                                                                                                                                                 06-MAR-2002; 2002US-00092885
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                                                                                                                                                                                                                                                                          (HERM/)
                                           Sequence 16 BP; 3 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              (JOHE/)
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                                                                                                                                                                                                                                                                         HERMIDA L C. HOPPA N L.
                                                                                                                                                                                                                                                                                                           SAMAL
              Similarity
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                                                                                                                                                                                                                                      Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page
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                                                                                                                                      Page 5; Opp; English.
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              100.0%;
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                        1.6%;
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Pred. No.
             Score 16;
Pred. No.
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                                                                                                                                                                                                                                          Hoppa NL,
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. 1.5e+03;
                       DB 1;
              1.5e+03
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                        Length 16;
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AGCCTCCCAAAGTGCT 396

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RESULT 1654
AAD63086/c
ID AAD6308
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ID AAA2
XX AAA2
AC AAA2
XX 19-J
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAD63086 standard;
                                                                                                                                                                                                                                                            The present invention discloses a method for generating five prime betandem tag libraries of cDNAs. The step involves isolating a sample mRNAs, amplifying the released tags, concatenating the amplified tag form concatenated tags, amplifying and isolating the concatenated tag The present sequence is human tandem tag DNA
                                                                                                                                                                                                                                                                                                                                                                                                                          Samal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tandem tag; concatenated tag; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human tandem
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
                                                                                  AAA22740;
                                                                                                     AAA22740 standard; RNA;
                                                                                                                                                                                                                                            Sequence 16
                                                                                                                                                                                                                                                                                                                             Disclosure;
                                                                                                                                                                                                                                                                                                                                                  concatenated
                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HERM/)
                                         Integrin subunit beta 3 substrate sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                              (JOHE/)
                                                               19-JUN-2000
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                                                                                                                                                                                                             Local
                                                                                                                                                                            381 AGCCTCCCAAAGTGCT 396
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) HERMIDA L C
) HOPPA N L.
) JOHE K K.
                                                                                                                                                                                                 l Similarity
16; Conserv
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LI Y.
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                                                                                                                                                          AGCCTCCCAAAGTGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                         Li Y,
                                                                                                                                                                                                                                                                                                                             Page
                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                            BP; 3 A;
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Matches 6; Conserv:
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                                                                                                                                                                                                                                                              RESULT 1656
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                                       19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 3 A; 1 C; 3 G; 0 T; 10 U; 0 Other;
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                                                                                                                                                                                       AAA22748 standard;
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Pred. No.
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Query Match Best Local Matches

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Length 17;

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Sequence 17 BP;

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1 C; 4 G; 0 T; 7 U; 0 Other;

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Cc cleaving activity, which specifically cleave RNA encoded by an aryl comparison nuclear transporter (ARNT) gene, an integrin subunit beta 3 cc pene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17561 to AAA17622 represent ribozyme sequences for AAA17168 to AAA17681 to AAA17622 represent ribozyme sequences for Tie-2, and AAA19887 to Cc and AAA1758 to AAA17680 and AAA17685 to AAA17888 represent their cc carresponding target sequences; AAA17685 to AAA18385 and AAA19086 to AAA19222 represent their corresponding target sequences; AAA17685 to AAA18385 to AAA19086 cc AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21361 and AAA21501 to AAA21595 to AAA21500 and AAA19223 to AAA21688 represent their corresponding target sequences; AAA21596 to AAA21688 represent their corresponding target sequences; Cc AAA21596 to AAA21688 represent their corresponding target sequences; Cc AAA21699 to AAA21688 represent their corresponding target sequences; Cc AAA21699 to AAA22475 and AAA22363 to AAA23343 to AAA23422 represent their corresponding target sequences; Cc AAA21689 to AAA22475 and AAA223476 to AAA23343 to Cc AAA23422 represent their corresponding target sequences; Cc AAA21899 to AAA22475 and AAA223476 to AAA23343 to Cc AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA23422 represent their corresponding target sequences. The ribozymes of Cc C AAA2342 represent their corresponding target sequences. The ribozymes of Cc C AAA2342 represent their corresponding target sequences.
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes enzymatic nucleic acid molecules with cleaving activity, which specifically cleave RNA encoded by an aryl
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AAA22736;

19-JUN-2000

(first entry)

Integrin subunit beta 3 substrate sequence

aryl

hydrocarbon nuclear transport;

ARNT; TIE-2; SEQ ID NO:5962.

angiogenesis, pin ribozyme;

integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipooriatic, ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;

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Matches 13
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
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                                                   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                  Sequence
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Query Match Best Local

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Other

of ARNT, Tie-2

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Crieaving activity, which specifically cleave RNA encoded by an aryl collegation nuclear transporter (ARNT) gene, an integrin subunit beta 3 crosses an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to Crorresponding target sequences; AAA17685 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, crorresponding target sequences; AAA17685 to AAA18385 and AAA19087 to Crorresponding target sequences; AAA17685 to AAA18385 and AAA19087 to Crorresponding target sequences; AAA17685 to AAA18385 and AAA19086 crorresponding target sequences; AAA17685 to AAA18385 and AAA19086 crorresponding target sequences; Crorresponding target s
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; 88
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                                                syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu and other syndromes and diseases related to the levels of ARI integrin subunit beta-3
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                                                                                       The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a fie-2 gene AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17563 and AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC and AAA19155 to AAA12222 represent their corresponding target sequences; CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme and AAA21592 represent ribozyme for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA19223 to AAA21688 represent their corresponding target sequences for integrin subunit beta 3, and AAA22476 to AAA23343 to CC aAA23422 represent their corresponding target sequences. The ribozymes of CC the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARND), inflammation, and arthritis, as well as magiofibroms. Kingel Trenaunaveber entome. On the Stains, Sturge Weber Rendu syndrome. CC syndrome. Sturge Weber Rendu syndrome.
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                                    syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu and other syndromes and diseases related to the levels of ARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of an mRNA encoding
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The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl chydrocarbon nuclear transporter (ARNT) gene, an integrin submit beta 3 cc gene, an integrin alpha 6 submit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, cc and AAA17168 to AAA17563 and AAA17623 to AAA1684 represent their cc corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cc and AAA19155 to AAA19222 represent their corresponding target sequences; AAA17623 to AAA21635 to AAA22361 and AAA21501 to AAA21595 represent ribozyme sequences; CC AAA19223 to AAA21688 represent their corresponding target sequences; CC AAA19223 to AAA2248 and AAA21501 to AAA22352 represent ribozyme sequences; CC AAA21896 to AAA22475 and AAA23363 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to AAA22475 and AAA23422 represent ribozymes of the invention are used for modulating target sequences. The ribozymes of stability of an mRNA encoding angiogenic factor, especially ARNT, contegrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related comacular degeneration (ARND), inflammation, and arthritis, as well as
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nes 4; Conservative
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Pred. No. 1.5e+03
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RESULT 1661
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Best Local :
                                                                                                                                                                                                                                  The present invention relates to detecting a genetic predisposition in a human subject for non-responsiveness to statin drug treatment, involving amplifying nucleic acids including a non-coding or untranslated region within the 3' end of the human lipoprotein lipase (LPL) gene from a tissue sample. The method is useful for determining which patients suffering from coronary artery disease, or which coronary artery bypass graft (CABG) patients, will likely not respond positively to statin drug treatment with respect to stenosis of a coronary artery or bypass graft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               angiofibroma of tuberous sclerosis, pot-wine stains, Sturge was syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu and other syndromes and diseases related to the levels of AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetic testing for determining non-responsiveness to statin drug in patients of a coronary artery disease, involves analyzing amplification products for homozygosity for a variant allele in the human lipoprotein
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larity 100.0%;
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Pred. No.
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Pred. No.
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or bypass graft
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RESULT 1662

WO2003025175-A2

Homo sapiens.

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                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel process for a manufacturer to obtain customer orders for custom-designed biochips in an automated process invention also includes an automated system and process for providing fully automated process for the design, manufacture and analysis of defaulty automated process for the design, manufacture and analysis of defaulty automated process for the design, manufacture and analysis of design.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Automated process for custom-designed biochip design, comprises obtaining desired target sequences from customer, creating sequence content motif for an array and applying the motif to a surface suitable for later
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                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression;
                                                                                                          Tumour suppression related human fukutin oligo SEQ ID No 3745.
                                                                                                                                                                                  ABT38108 standard; DNA;
                                                                                                                                                                                                                                                                                                                                               Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                  for biological array devices. The sequence represents a capture probe designed in the invention for the "sample ataxia" set of targets, as example of an array that may be designed using the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5;
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22-NOV-2000;
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2000US-0252880P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive cc nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement CC or any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)seense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, colypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and CC diseases. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene CC diseases. The polypeptides can also be used to generate antibodies, and CC chips. The nucleic acid sequences of the invention can be used in gene CC related human fukutin oligonucleotide of the invention can be used in gene
                                                                                                                                                                                                                                                                                                                                                                            RESULT 1664
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Matches 16
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                                                                                                                    Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 471; 720pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001; 2001FR-00011978
                                        WO2003025175-A2
                                                                                                                                                                                                                   Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                 ABT35067
                                                                                                                                                                                                                                                                                                                                       ABT35067 standard; DNA; 17
                                                                                                                                                                                                                                                          12-JUN-2003
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                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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100.0%; Pred. No. 1.5e+03;
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27-MAR-2003.

30-JUL-2002; 2002EP-00016874.

EP1281758-A2

Homo sapiens

05-FEB-2003

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1 chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; developmental disorder; ss.

Human MDZ7 scanning oligonucleotide SEQ ID 5299

20-NOV-2003 ADB04313;

(first entry)

ADB04313 standard; DNA; 17

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RESULT 1665
ADB04313
ID ADB0431
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                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence with, after optimal CC hybridizes to them under highly stringent conditions, or the complement CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one C component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, CC polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell CC diseases that are characterised by development of tumours or cell CC degeneration, specifically cancer but also Alzheimer's disease and CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these CC diseases. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene characterised by acid sequences of the sequence can be used in gene can 
                                                                                                                                                                                                                                         Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 1 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 116; 720pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011978.
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                                                                                                                                                                                     837 GATCTGCCTGCCTCGG 852
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                                                                                                                                   GATCTGCCTGCCTCGG
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Pred. No.
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RESULT 1666
ADB04443
ID ADB0444
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AC ADB0444
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Cytosta
KW Zinc fil
KW Zinc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to novel human zinc finger-containing CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, CC encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, CC or in manufacturing a medicament for treating or preventing a disorder caspociated with decreased or increased expression or activity of MDZ3, CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic caids and proteins are also useful for diagnosing or monitoring a disease CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic caids can also be used as probes to detect and characterize gross calterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are cuseful in constructing microarrays for measuring gene expression. The CC vaccines. The present sequence was used to illustrate the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; developmental disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human MDZ7
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                                                                  Shannon M,
                                                                                                                                                                                                                                       30-JUL-2002; 2002EP-00016874
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         WPI; 2003-423107/40
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                                                                  Gu Y
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                               Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oligonucleotide SEQ ID 5429.
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Pred. No.
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hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chromosome 15q26.1; cancer;
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New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
or MDZ12, e.g. cancer.
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Example 8; SEQ ID NO 5429; 103pp; English.

The present invention relates to novel human zinc finger-containing compositions and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, CMDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p21.2 and MDZ12 sequences are useful in therapy, 16p2 associated with decreased or increased expression or activity of MDZ3, 16p2 associated with decreased or increased expression or activity of MDZ3, 16p2 acids and proteins are also useful for diagnosing or monitoring a disease 16p2 acids can also be used as probes to detect and characterize gross 16p2 and 16p2 and 16p2 associated with 16p2 associated with 16p2 associated with 16p2 associated with 16p2 and 16p2 and

Sequence 17 BP; 5 A; 1 C; 4 G; 7 T; 0 U; 0 Other;

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Best Local S
Matches 16
           774 GTATTTTTAGTAGAGA 789
                                16;
                                        Similarity
GTATTTTTAGTAGAGA
                              Conservative
                                       100.0%;
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                                        Score 16;
Pred. No.
                                 Mismatches
                                       DB 1; Le
1.5e+03;
                                                Length 17;
                                  Indels
                                  <u>,,</u>
                                  Gaps
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RESULT 1667 ADB04438 Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss. Human MDZ7 scanning oligonucleotide SEQ ID 20-NOV-2003 ADB04438 standard; DNA; 17 (first entry) 5424.

Homo sapiens.

EP1281758-A2

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181

AEOMICA INC

Z, မှ ۲ Nguyen C;

2003-423107/40

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer. MDZ3,

Example 8; SEQ ID NO 5424; 103pp; English

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ADB04281
XX ADB

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Best Local S
Matches 16
The present invention relates to nover the MDZ1, MDZ1, MDZ1. MDZ3 is proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15g26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ3, and MDZ12 sequences associated with decreased or increased expression or activity of MDZ3, mDZ3, as a cancer or developmental disorders. The nucleic
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zinc finger
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUL-2002; 2002EP-00016874
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                                                                                                                                                                                                                                                                                                                                                    Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 4 A; 0 C; 2 G; 11 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                            ID NO 5267; 103pp; English
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100.0%; Pred. No.
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RESULT 1669
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          zinc finger protein; MDZ3; MDZ4; MDZ7; chromosome 6p21.3-22.2; chromosome 16p developmental disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-AUG-2001; 2001US-00922181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTTGAGACAGAGT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Guy,
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy; vaccine; human;
DZ4; MDZ7; MDZ12; chromosome 7q22.1;
mosome 16p11.2; chromosome 15q26.1; cancer;
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proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 1pp11.2 and MDZ12 is encoded at chromosome 1pp11.2 and MDZ12 is encoded at chromosome 1pp11.2 and MDZ12 is encoded at chromosome 15g26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for dispnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 gross are material microscopic acids and protein acids on MDZ3, MDZ4, MDZ7, or MDZ12 gross are useful in constructing microarrays for measuring gene expression. proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the inventic The present invention relates to novel human zinc finger-containing

New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disorcassociated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer.

useful in disorder

of.

MDZ3,

WPI; 2003-423107/40.

Example 8; SEQ ID NO 5301; 103pp; English

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ADB04284
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                                                                                                                                                                                                         CC The present invention relates to novel human zinc finger-containing CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, CC or in manufacturing a medicament for treating or preventing a disorder CC associated with decreased or increased expression or activity of MDZ3, CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic CC acids and proteins are also useful for diagnosing or monitoring a disease CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic CC acids can also be used as probes to detect and characterize gross CC elseful in constructing microarrays for measuring gene expression. The CC proteins are useful as therapeutic agents for gene therapy or as CC vaccines. The present sequence was used to illustrate the invention.
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ1, MDZ7 or MDZ12, e.g. cancer.
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                                                                                                                                                                      Sequence
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616
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16; Conserv
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                                                                                    Similarity
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                                                                                                                                                                      17 BP; 4 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
  TTTTGAGACAGAGTCT
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Pred. No.
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RESULT 1671
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RESULT 1672
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-2003
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06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   anti-rheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human K-Ras DNAzyme substrate #717.
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             01-JUL-2003
                                                                     ACC63031 standard; DNA; 17
                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A; 6 C; 5 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 58; Page 98; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-140484/13
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                                        ACC63031;
                                                                                                                                                                                                                                                                                      ribozymes of
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                                                                                                                                                                                                                Similarity 81.2%;
                                                                                                                                                           CAGGCTGGTCTCGAAC 222
                                                                                                                                           CAGGCUGGUCUCGAAC 17
                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                         the invention
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               (first entry)
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Pred. No. 1.5e+03;
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ADB44260/c
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to murine oligonucleotides (ACC62754-ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Murine oligonucleotide associated with tumour supression,
                                                                                                                                 cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 63; 738pp; French
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17-SEP-2002; 2002WO-IB004219
                                                                                                                                                                                                                           18-DEC-2003
                             15-MAY-2003
                                                           WO2003040369-A2
                                                                                       Homo sapiens.
                                                                                                                                                                                           Tumour suppression/reversion associated nucleotide #4583
                                                                                                                                                                                                                                                       ADB44260
                                                                                                                                                                                                                                                                                     ADB44260 standard;
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                                                                                                                                                                                                                                                                                                                                                                              480 GTGCAGTGGTGATC 495
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                                                                                                                                                                                                                                                                                    DNA; 17
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suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                          fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under atticker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                      nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour
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Sequence 17 BP; 5 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 567; 771pp; French.
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S Query Match
Best Local Similarity
Matches 16; Conserv 480 GTGCAGTGGTGTGATC 495 16 GTGCAGTGGTGTGATC Conservative 100.0%; 1.6%; 0 Score 16; Pred. No. Mismatches DB 1; 1.5e+03; Length 17; Indels 0 Gaps <u>۰</u>

RESULT 1674 ACC54382 THE REPORT OF THE PROPERTY OF 맑 ACC54382; ACC54382 standard; DNA; 17

ss; tumour suppressor; antitumour; cytostatic; tumour suppression; Human tumour suppressor sequence #3149. 27-JUN-2003

(first entry

cellular degeneration. tumour regression; apoptosis; virus resistance; diagnosis

Homo sapiens

FR2826373-A1

27-DEC-2002

20-JUN-2001; 2001FR-00008139

20-JUN-2001; 2001FR-00008139

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XX FT.20-JUN-
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CC invent:
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Matches 16
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                                                                                                                                                                                                            New nucleic acid sequences associated with tumor suppression, r apoptosis or virus resistance are useful to diagnose and treat disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumour regression; appropriation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or
               invention relates to these sequences or sequences having at least a identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration.
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                                                                                                                                                                        Claim 1;
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                                                                                                                   tumour suppression or regression,
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                                                                                                                                                                                                          development of
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                                                                                                 represents an isolated nucleic acid sequence associated uppression or regression, apoptosis or virus resistance. ates to these sequences or sequences having at least 80%
                                                                                                                                                                        100; 798pp; French.
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Best Local S
Matches 16
                            that down regulate the expression or inhibit the function of a receptor (CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), CC largest kinase (IKK), or protein kinase PKR. The nucleic acids of the CC invention are useful for treating: cerebrovascular accident, central concrous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, CC testenosis or asthma), Crohn's disease (e.g. rheumatoid arthritis, CC ischaemia/reperfusion injury, glomerulonephritis, spesis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The CC nucleic acids of the invention are also useful for down-regulating the CC creates and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR CC invention and as a diagnostic tool to examine genetic conditions (e.g. actima and allergic rhinitis or actions of a target gene and as a diagnostic tool to examine genetic conditions of a target gene and as a diagnostic tool to examine genetic conditions (e.g. actima within diseased cells or to detect the presence of a charget RNA in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cance; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthrit; restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; fupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
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                                                                                                                                                                                                                                                                                                                                                                                Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2_receptor; PTGDR; IkappaB kinase; IKK;
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                                                                                                                                                                                                                                                                                                                                                Claim 59; SEQ ID NO 3727; 317pp; English.
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                                                                                    The invention comprises nucleic acids (e.g. antisense oligonucleotides)
C that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR),
C IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                             target RNA in a cell.
substrate sequence.
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                                              The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor. NOGO, prostaglandin D2 receptor (PTGDR),
CC RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC Invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC uncleic acids of the invention are also useful for down-regulating the
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
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                             target RNI
substrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 59; SEQ ID NO 2966; 317pp; English.
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Pred. No. 1.5e+0
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                               The invention comprises nucleic acids (e.g. antisense oligonucleotides) CC that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), CC KappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the cinvention are useful for treating: cerebrovascular accident, central convention are useful for treating: cerebrovascular accident, central convention are useful for treating: cerebrovascular accident, central conventions system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, cordinated the convention of accident, candidating, allergic conditions or asthma), Crohn's disease, diabetes, obesity, autoimmune CC disease, lupus, multiple sclerosis, transplant/graft rejection, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The CC cuties acids of the invention are also useful for down-regulating the CC expression of a target gene and as a diagnostic tool to examine genetic CC drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR
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Pred. No.
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RESULT 1680
ADL50215
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        that down regulate the expression or inhibit the function of a receptor of a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), in the function of a receptor (PTGDR), in the function are useful for treating; cerebrovascular accident, central of invention are useful for treating; cerebrovascular accident, central composition are useful for treating; cerebrovascular accident, central composition of glioma, inflammatory disease (e.g. rheumatoid arthritis, correstences; nupus, multiple sclerosis, transplant/graft rejection, autoimmune compositions (e.g. asthma, allergic transplant/graft rejection, The conditions (e.g. asthma, allergic trinitis or atopic dermatitis). The conditions of a target gene and as a diagnostic tool to examine genetic conditions of a target gene and as a diagnostic tool to examine genetic conditions of a target gene and as a diagnostic tool to examine genetic carget RNA in a cell. The present RNA sequence represents a human PKR conditions of the carget RNA in a cell. The present RNA sequence represents a human PKR conditions of the carget RNA in a cell. The present RNA sequence represents a human PKR conditions are sequence.
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Best Local S
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29-MAY-2001;
28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; protein kinase PKR; cerebrovascular accident; ord injury; cancer central nervous system injury; CNS injury; spinal cord injury; cancer melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthriti restenceis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; hupus; multiple scleroeis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 1 A; 10 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                        Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense oligonucleotide; neurite growth inhibitor; NOGO. prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PKR substrate sequence #1329.
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                                                                                                                                                                                                                                                                                                                                                                 Claim 59; SEQ ID NO 3748; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-APR-2002; 2002WO-US010512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         substrate;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                        invention comprises nucleic acids (e.g. antisense oligonucleotides) t down regulate the expression or inhibit the function of a receptor down regulate the expression or inhibit the function of a receptor (PTGDR) a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843 CCTGCCTCGGCCTCCC 858
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCUGCCUCGGCCUCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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2001US-0294412P.
2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Haeberli P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cord injury; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fosnaugh
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                         The invention comprises nucleic acids (e.g. antisense oligonucleotides)
that down regulate the expression or inhibit the function of a receptor
for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
IkappaB kinase (IKK), or protein kinase PRR. The nucleic acids of the
invention are useful for treating: cerebrovascular accident, central
nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
disease, lupus, multiple sclerosis, transplant/graft rejection,
conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
nucleic acids of the invention are also useful for down-regulating the
compression of a target gene and as a diagnostic tool to examine genetic
drifts and mutations within diseased cells or to detect the presence of a
target RAR in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis; restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                      Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                                                                                                                                                                                                                                         protein kinase PKR genes, for treating cancer and inflammatory disease
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                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3447; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chowrira B,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Haeberli P,
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Pred. No. 1.5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fosnaugh
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RESULT 1682
RESULT 1682
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                                                    The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO; prostaglandin D2 receptor (PTGDR),
CC RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lugus, multiple sclerosis, transplant/graft rejection,
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC mucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrace accompany
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local :
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis; restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 59; SEQ ID NO 3442; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-058513/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         668 TCTTGGCTCACTGCAA 683
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2001US-0294412P.
2001US-0315315P.
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Pred. No. 1.5e+0;
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                                 The invention comprises nucleic acids (e.g. antisense oligonucleotides) CC that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), CC (RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the CC (IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the CC (IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the CC (IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the CC (IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the injury, spinal cord injury, cancer (e.g. melanoma, CC (IxappaB kinase (IKK), or protein kinase (IKK), or p
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase o
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P, Mcswiggen J,
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                                                   that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), C2 IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central carvous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, Iymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, C2 restenosis or asthma), Crohn's disease, diabettes, obseity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, C3 ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P
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                           The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDP), CI RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the cinvention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, CI lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune conditions or glioma, multiple sclerosis, transplant/graft rejection, conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic chiffs and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR cube conditions of the present RNA sequence represents a human PKR cube conditions of the present RNA sequence represents a human PKR cube conditions within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR cube conditions within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR cube conditions within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR cube carget RNA in a cell. The present RNA sequence represents a human PKR cube carget RNA in a cell carget RNA sequence represents a human PKR cube carget RNA in a cell carget R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease
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28-AUG-2001; 2001US-0315315P
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                                                              CC that down regulate the expression or inhibit the function of a receptor (PTGDR), cross a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), cross a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), cross a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), cross a neurous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, core process, inflammatory disease (e.g. rheumatoid arthritis, crestencesis or asthma), Crohn's disease, diabetes, obseity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, crestencesis or asthma), Crohn's disease, diabetes, obseity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, crestencesis or asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic diffs and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 59; SEQ ID NO 3960; 317pp; English.
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Pred. No. 1
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                                                   The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin Dz receptor (PTGDR). RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central rervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease (e.g. rheumatoid arthritis, and altergic disease, lupus, multiple sclerosis, transplant/graft rejection, corditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The mucleic acids of the invention are also useful for down-regulating the cappession of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR
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          Query Match
Best Local
Matches
                                                                                 of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a subject at risk of breast cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The current sequence is that of an Extend primer (also described as probe) the invention which was used to genotype human Rho family guanine-nucleotide exchange factor KIAAO861 gDNA which has been mapped to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 6 A; 7 C; 1 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADP46267
                                                                                                                                                                                                                                                                                                                                                       Roth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-AUG-2004
                                                                                                                                                                                                   The invention relates to a novel method for identifying a subject at
                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                           Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample
                                                                                                                                                                                                                                                                                                                                                                                                        25-NOV-2002;
24-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                             25-NOV-2003; 2003WO-US037948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004047623-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rho family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Extend
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                                                                                                                                                                                                                                                                                                                                                                               (SEQU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1122 CAAACTCCTGACCTCA 1137
                                                                                                                                                                                                                                                                                                                                                       RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer; cytostatic; gene therapy; human; ss; prim
nucleotide polymorphism;
mily guanine-nucleotide exchange factor; KIAA0861;
some 3q27.3; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CAMACUCCUGACCUCA 16
16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer
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                                                                                                                                                                                                                                                                                                                                                                                 SEQUENOM INC
                                                                                                                                                                                                                                       6; Page 99;
             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; DNA; 17
                                                  17
                                                                                                                                                                                                                                                                                                                                                       Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                  BP; 3
                                                                       position 3q27.3.
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0429136P.
2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               used to genotype human KIAA0861 polymorphism
                                                  A; 6 C; 3 G; 5
                                                                                                                                                                                                                                       289pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81.2%;
             100.0%;
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                           6.
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                                                                                                                                                                                                                                         English.
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Pred. No. 1.5e+03;
             Score 16;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                          Kammerer
  Mismatches
                                                  T; 0 U; 0 Other;
              1.5e+03;
                          DB 1;
                                                                                                                                                                                                                                                                                                                                                          SM,
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                                                                                                                                                                                                                                                                                                                                                          Reneland
  0
                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; primer; PCR;
  Indels
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RESULT 1690
AAX90320/c
ID AAX9032
XX AAX9032
AC AAX9032
XX
DT 24-SEP-
XX
DE Oligon
XX
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AAT36226/c
ID AAT36226 standard; DNA;
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                                                                                                                                                                                                               Query Match
Best Local S
Matches 16
                Oligonucleotide RT27 used
                                                                                                                                                                                                                                                                                                      The present oligonucleotide reduces T cell CD28 gene expression, useful in the treatment of CD28 mediated diseases, particularly immune system disorders, e.g. graft versus host disease, septic shock, viral disease, psoriasis, type I diabetes mellitus, thyroiditis, sarcoides, multiple sclerosis, uveitis, rheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel disease, etc. . Reducing CD28 expression may reduce effects of antigenic stimulation of CD28 positive T cells, with a consequent reduction in cytokine release. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                 vilgo:nucleotide which reduces CD28 gene expression in T cells - for treating immune system diseases, e.g. graft vs. host disease, septic shock, psoriasis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Reduction; T cell; CD28; gene expression; treatment; immune system; disorder; graft versus host disease; septic shock; viral disease; psoriasis; type I diabetes mellitus; thyroiditis; sarcoides; multiple sclerosis; uveitis; rheumatoid arthritis; 5'-UTR; systemic lupus erythematosus; inflammatory bowel disease; antisense; oligonucleotide; 5'-untranslated region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
16-APR-1997
                                                                                                                                                                                                                                                                   Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-FEB-1995;
18-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense
                                                                                             AAX90320 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 27; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-384228/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9624380-A1
                                          24-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ICNC)
                                                                                                                                                                                     872 TACAGGCGTGAGCCAC 887
                                                                                                                                                              18
                                                                                                                                                                                                               16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ICN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oligo targetting
                                                                                                                                                                                                                                                                                               field.)
                                                                                                                                                                                                                                                                   BP; 3
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                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
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95US-00529878.
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                                                                                                                                                                                                                                                                   A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                            1.6%;
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                ä
                                                                                             ВP
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Pred. No.
                an
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                Example
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. 1.6e+03;
                from
                US5932556.
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-FEB-1995;
18-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CD28; inhibition; antisense oligonucleotide; interleukin 2; IL-2; immune system mediated disease; gamma-interferon; IL-8; ss.
                                                                                                                                                            Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; probe; primer; ss.
                                                                                                                                                                                                        Haematopoietic cell proliferation disorder related oligonucleotide #82
                                                                                                                                                                                                                                                                       ABZ09942 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-384228/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tam
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                                                                                                                             Homo sapiens
Synthetic.
                                        26-MAR-2001; 2001US-0278333P
                                                              26-MAR-2002;
                                                                                   03-OCT-2002
                                                                                                        WO200277272-A2
                                                                                                                                                                                                                             16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TAMR/)
                   (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                 872 TACAGGCGTGAGCCAC 887
                                                                                                                                                                                                                                                                                                                             18
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                    EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Col 15; 45pp;
                                                                                                                                                                                                                                                                                                                                                                       Conservative 0;
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                                                               2002WO-EP003401
                                                                                                                                                                                                                             (first entry)
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95US-00529878.
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                                                                                                                                                                                                                                                                                                                                                                                            1.6%;
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                                                                                                                                                                                                                                                                                                                                                                       Score 16; DB ;; Pred. No. 1.6 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                  G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
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                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Berlin K,

Braun A,

Distler J,

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Mueller J;

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Best Local
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Lewin A,
Schwope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lymphocytic leuksemia and acute myelogenous leuksemia; as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related D sequences. The nucleotide sequences from the present invention can all be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enabl highly specific classification of haematopoietic cell proliferative disorders allowing for improved and informed treatment of patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a method for detecting and differentiating between haematopoletic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target mucleic acid in a biological sample obtained from the subject with at least 1 reagent, biological sample obtained from the subject with at least 1 reagent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ019861 to ABZ11118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy; human; ss; melanoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                        melanoma associated polymorphic variation; SNP; single nucleotide polymorphism; cyclin-dependent kinase 10; CDK10; probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO56481 standard; DNA; 18
                                                                                        06-NOV-2002;
23-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human cyclin-dependent kinase 10,
                                                                                                                                                                          06-NOV-2003; 2003WO-US035879.
                                                                                                                                                                                                                                                                                           WO2004044164-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003-018942/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       967 ATCTCGGCTCACTGCA 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
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                                    SEQUENOM INC
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Lipscher E, Maier
I, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 82; 117pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                        2002US-0424475P
2003US-0489703P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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Pred. No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDK10 proximal
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tto T, F
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RESULT 1693
AAV57826/c
ID AAV5782
XX AAV5782
AC AAV5782
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UN) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence represents a human cyclin-dependent kinase 10, CDK10, proximal SNP probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of identifying a subject at risk of melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roth RB, Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Manic-depressive illness; susceptibility; genotype; diagnosis; chromosomal marker; polymorphic marker; chromosome 18; human; myo-inositol monophosphatase protein; IMP-18p; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                 Detera-Wadleigh
Berrettini WH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human chromosome
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                                                                                                                                                                                              WPI; 1998-272247/24
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                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                          97WO-US019381.
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                                                                                                                                                                                                                                                                                                                                                                                       96US-0029278P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83;
                                                                                                                                                                                                                                              SD, Gershon ES, Badn
Yoshikawa T, Sanders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer F for D18S378.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 C; 6 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Braun
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Pred. No.
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                                                                                                                                                                                                                                                 Badner JA, Goldin
ders AR, Esterling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Le
1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
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New isolated IMP.18p myo-i products for determining s as targets for preventive

myo-inositol monophosphatase - used to ning susceptibility to manic depressive ntive and therapeutic treatments.

develop

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Disclosure; Page 3;

118pp; English

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RESULT 1694
ADF68319/c
ID ADF6831
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A method has been developed for determining a genotype associated with increased susceptibility to manic-depressive (MD) illness. The method comprises determining the genotype of an affected individual with at least one polymorphic marker localised within the chromosomal region defined by and including markers D18S843 and D18S869 and determining the genotype associated with increased susceptibility to MD disorder. The method can be used for determining susceptibility to MD illness including bipolar disorder, genetic counselling of individuals from families affected with MD illness, and aid in the differential diagnosis of MD illness from other psychiatric pathologies. Products from the present invention can also be used to obtain modulators of IMP.189 myo- inositol monophosphatase protein activity and as targets for preventive and therapeutic treatments. The present sequence represents a PCR primer from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                            New nucleobase oligomers that inhibit expression of inhibitor of apoptosis gene, useful for treating cancer and other lymphoproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; antisense therapy; apoptosis enhancer; cancer; lymphoproliferative disorder; leukaemia; myelodysplastic syndrome; polycythemia vera; lymphoma; Hodgkin's disease; waldenstrom's macroglobulinemia; breast cancer; basal cell carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human antisense APO2 nucleobase oligomer SEQ ID NO:164
                                                                                                                                                                                                                 27-MAR-2002; 2002US-0367853P.
                                                                                                                                                                                                                                                  27-MAR-2003; 2003WO-IB001670
                                                                                                                                                                                                                                                                                                                    WO2003080638-A2
                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADF68319 standard; DNA; 19
                                                                                                                                                                                                                                                                                   02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleobase oligomer; inhibitor-of apoptosis inhibitor; TAP inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table 1 in the present invention (see AAV57798 to AAV57877)
                                                                                                               2003-779241/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       carcinoma;
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                                                                                                                                                                                 AEGERA THERAPEUTICS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCTGTCACCCAGGCT 1
                                           gene, useful for treat
by inducing apoptosis.
                                                                                                                                              Mcmanus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     melanoma; retinoblastoma; human; ss.
                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/note= "N = T or U where each nucleobase may be part
ribonucleotide, deoxyribonucleotide, or nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.6%;
                                                                                                                                              'n
                                                                                                                                                Durkin JP
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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1.6e+03;
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Example 1;

SEQ ID NO 164; 259pp; English

(UYQU) UNIV QUEENSLAND

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Crimbed on each side by four 2'-O-methyl RNA residues that inhibits the cexpression of an inhibitor-of apoptosis (IAP) in the cell. Also described: (1) a pharmaceutical composition (II) comprising (I) and a carrier; (2) a catalytic RNA molecule (III) capable of cleaving XIAP, acid encoding one or more (III) positioned for expression in a mammalian cell; (4) a double-stranded RNA molecule (III) comprising a nucleic corresponding to a sequence comprising 1 positioned for expression in a mammalian comprision of 21-29 corresponding to a sequence comprising 1 pucleotides, as given in comprise at least eight consecutive nucleobases that comprise at least eight consecutive nucleobases corresponding to a sequence fully defined in the specification, comprising, e.g. 19 cop domain situated between the first admain are capable of duplexing to form the double-stranded hairpin RNA molecule; and (6) an expression vector (VI) comprising a nucleic acid molecule; and (6) an expression vector consecutive, and can be used in antisense therapy. (I) is useful for enhancing the apoptosis of a cell in an animal, preferably human consecutive molecule positioned for expression of an IAP in the cell. (I) is also useful for treating an animal having a cancer or lymphoproliferative disorder. The cancer includes acute myelobases cute leukaemia, acute myelocytic leukaemia, between the myelomonocytic leukaemia, chronic myelocytic leukaemia, between the myelomonocytic leukaemia, cutte entre of larctinoma, lung carcinoma, lung carcinoma
RESULT 1695
ACA88916/c
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Matches 16
                                                                                                                                                                                                                                                                            Genetic marker selection; multiplex PCR amplification; prenatal diagnostic testing; foetal sex determination; genetic identification; DNA profiling; DNA fingerprinting.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                macroglobulinemia, breast cancer, basal cell carcinoma, lung carcinoma, melanoma and retinoblastoma. The present sequence is used in the
                                   12-OCT-2001; 2001AU-00008234.
12-OCT-2001; 2001AU-00008235.
                                                                                                                                                                                                                                                                                                                                                                   Selection and
                                                                                                                                                                                                                                                                                                                                                                                                         08-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACA88916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACA88916 standard;
                                                                                                                                                                                                                     Homo sapiens
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                                                                                               14-OCT-2002; 2002WO-AU001388.
                                                                                                                                                                               WO2003031646-A1
                                                                                                                                                                                                                                                           forensic analysis;
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                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                               amplification of genetic markers PCR related primer #27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of the present invention.
                                                                                                                                                                                                                                                           PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.6%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U; 1 Other
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RESULT 1696
AAH48599/c
ID AAH4859
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid sequence amplification, for genetic testing or facilitating multiplex PCR amplification from limiting amounts of target nucleic acid. The methods are also useful for improving genetic diagnostic and screening methods, such as prenatal diagnostic testing, foetal sex determination or genetic identification, e.g. DNA profiling or DNA fingerprinting. The nucleic acid sequence amplification is also useful in forensic analysis of degraded, old, ancient and difficult samples that are difficult to amplify and identify. This sequence represents a PCR are difficult to amplify and identify.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Selecting genetic markers as targets for nucleic acid sequence amplification, useful for improving genetic testing, e.g. fetal sex determination, comprises selecting each of the genetic markers according to a heterozygosity index.
                                                                                                                                                                                                                                                                                   Fascin; regulatory sequence; human; dendritic Cell; dictated, comments antibacterial; antifungal; antiparasitic; anti-allergic; neurological; immunomodulatory; apoptotic; expression regulator; vaccine; allergen; Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy; antoimmune disease; transplant rejection; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention describes a method of selecting genetic markers as targets for nucleic acid sequence amplification comprising selecting each of the genetic markers according to a heterozygosity index of 0.5 or greater. Selecting and amplification of genetic markers are useful as targets for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 36; Page 39; 64pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-381725/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Findlay I,
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH48599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH48599 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                              Human fascin associated primer SEQ
           WPI; 2001-451858/48
                                                                                                                                                                               12-JAN-2001;
                                                                                                                                                                                                                                      WO200151631-A2
                                       Reske-Kunz A,
                                                                                                                                     13-JAN-2000;
02-MAR-2000;
                                                                                                                                                                                                          19-JUL-2001
                                                                                                                                                                                                                                                                 sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
16; Conserv
                                                                                                            RESKE-KUNZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCTGTCACCCAGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGTCACCCAGGCT 650
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                     2000DE-01001169
2000DE-01010188
                                                                                                                                                                                2001WO-EP000362
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                       Ross X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 selection and amplification of genetic markers
                                                                                                            Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,Td
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.6%;
                                          Ross
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 16;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G; 2 T; 0 U;
                                         æ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                묫
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                                          3
                                                                                                                                                                                                                                                                                                                                                                                  51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 19;
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New regulatory sequences from the fascin gene, useful for providing dendritic cell-specific expression of e.g. antigens, e.g. for vaccination against tumors and infections.

Claim 2b; Page 108; 117pp; German.

cc used to regulate expression of antigens, immunoregulators, antisense cc sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host cells that contain (A) are useful: (i) in vaccines against viruses. CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-cyclakob and Alzheimer's disease; and (ii) for gene therapy of tumors, allergies, infections, autoimmune diseases and transplant rejection. They CC allergies, infections, autoimmune diseases and transplant rejection. They CC an also be provide specific expression of antigens and immunoregulators cc in DC; for isolation and identification of cell factors and cis-elements cf rom regulatory sequences that mediate DC-specific expression; to cetermine the degree of maturity of DC and to block transcription cc factors, by providing binding sites in DC. (A) provide DC-specific expression of nucleic acid under their control, allowing a more specific cegulation of the immune response and eliminating the long and laborious purification of DC (since a complete leucocyte population may be control, acid to the immune response and eliminating the nucleic acid under their control. This sequence represents control acid to the invention to the invention of the immune response and eliminating the nucleic acid under their control according to the invention to the invention of the invention to the invention of the invention of the invention to the control according to the invention to the transformation that the invention to the transformation the invention to the transformation that the invention to the inventi allergic, This invention describes novel regulatory sequences (A) derived from human fascin that provide specific expression in dendritic cells (DC) which primer have antiviral, associated with the human fascin gene described in neurological, antibacterial, immunomodulatory antifungal, antiparasitic, anti-tory and apoptotic activity. (A) are the invention and

Sequence 20 BP; 4 A; տ Ç 7 G. 4 Η -: 0 U; 0 Other;

Matches Query Match Best Local 967 ATCTCGGCTCACTGCA 982 16; Similarity Conservative 100.0%; 0 Score 16; Pred. No. Mismatches 1.7e+03; hes 0; DB 1; Length 20; Indels 0 Gaps 0

RESULT 1697 AAS21754/c AAS21754 standard; DNA; 20 ₽P

밁 S

17

N

21-NOV-2001 (first entry)

Mouse Survivin antisense oligonucleotide #56.

hyperproliferative Survivin; human; mouse; cytostatic; antisense oligonucleotide; ve condition; cancer; apoptosis; cytokinesis; 88.

Mus musculus. Synthetic

WO200157059-A1

30-JAN-2001; 2001WO-US002939

09-AUG-2001

02-FEB-2000; 2000US-00496694

SISI PHARM INC

Ę, Ackermann Ę, Swayze 四四, 3

2001-488863/53

treatment of Novel antisense compounds cancer for modulating the expression of Survivin and

Example 18; Page 62; 120pp; English

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RESULT 1698
AAD25167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CC The invention relates to antisense oligonucleotides targeted to a nucleic CC acid molecule encoding human Survivin, where the antisense CC oligonucleotide inhibits the expression of human Survivin. These CC antisense oligonucleotides are used in the treatment of an animal CC suffering from a disease or condition associated with Survivin, e.g. a CC hyperproliferative condition such as cancer, and comprises administering CC atherapeutically or prophylactically effective amount of the antisense CC oligonucleotides con that expression of Survivin is inhibited. The CC disease or condition characterised by a reduction in apoptosis comprising administering the antisense oligonucleotide to the antisense oligonucleotide condition, the CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g. CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the proliferation in a cancer cell by contacting CC cell cycle, or inhibit the method of the invention
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Best Local S
Matches 16
                                                                                                                                            07-JUN-2000; 2000US-0209927P.
07-JUN-2000; 2000US-0209928P.
07-JUN-2000; 2000US-0210091P.
08-JUN-2000; 2000US-0210208P.
26-JUN-2000; 2000US-0214023P.
26-JUN-2000; 2000US-0214023P.
26-JUN-2000; 2000US-0214023P.
26-JUN-2000; 2000US-0214023P.
26-FEB-2001; 2001US-0271630P.
26-FEB-2001; 2001US-0271633P.
26-MAR-2001; 2001US-0278915P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; NOV7b; gene therapy; atherosclerosis; cardiomyopathy; leukaemia; neurological; neurodegenerative disease; cell signalling; inflammation; diabetes; seizure; muscular dystrophy; epilepsy; allergy; adenocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD25167 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20
                                        Majumder K,
Zerhusen B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     coagulation disorder; reproductive; respiratory; bone; nephrological; multiple sclerosis; mental depression; gastro-intestinal disease; can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human NOV7b
                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200194416-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bronchitis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         884 CCACCACGCCCGGCTT 899
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 system disorder; Addison's disease; migraine; dermatomyositis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                          CURAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACCACGCCCGGCTT 5
                  Macdougall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene expression assessing forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                  Spytek KA, Tchernev VT, Gusev V, Burgess C, Li cdougall J, Smithson G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US018675
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
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                  L, Malya
Ellerman
                                                             Colman SD,
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hes 0;
                                           Malyankar UM,
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                                                             Padigaru
                                        Gangolli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer;
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문 S

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RESULT 1699
ADD71348/c
ID ADD71348 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to isolated nucleic acids encoding polypeptides. CC designated NOVX polypeptides. The NOVX polypeptide and nucleic acid are CC useful for treating cardiomyopathy, atherosclerosis, diabetes or a CC disorder related to cell signal processing and metabolic pathway CC modulation. The NOVX polypeptide, nucleic acid and antibody are useful CC for treating or preventing a syndrome, e.g., various tissue/organ CC inflammation, muscular dystrophy, neurological and neurodegenerative CC diseases, cardiovascular diseases, coagulation disorders, cancers CC (leukaemia, adenocarcinoma), multiple sclerosis, respiratory diseases, CC (reproductive disorders, allergy, seizures, mental depression, epilepsy, CC gastro-intestinal diseases, bone disorders, nephrological disorders, CC urinary system disorders, immunological disorders, Addison's disease, CC urinary system disorders, immunological disorders, Addison's disease, CC migraine, dermatomyositis and bronchitis. The present sequence is a PCR CC sequence is incorrectly referred as SEQ ID NO: 75 in page 168 of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful for treating a syndrome associated with a NOVX-associated disorder, e.g. cardiomyopathy, atherosclerosis, neurological and neurodegenerative
                                                                                                                                                                                                          07-SEP-2001; 2001JP-00271870.
28-MAR-2002; 2002JP-00090861.
                                                                                                                                                                                                                                                                                                                                                                                       diabetes; haplotype; polymorphism; diagnosis; renopathy; intron;
glutamine:fructose-6-phosphate amide transferase 1; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                       GFAT 1 gene intron 3 polymorphism PCR primer #13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADD71348;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 1 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 168; 189pp;
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                                                                                                                                                                                                                                                                                           20-MAR-2003
                                                                                                                                                                                                                                                                                                                           WO2003023063-A1
                                                                                                                                                                                                                                                           06-SEP-2002; 2002WO-JP009093.
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                           Itakura M,
                                                                                                                                                                           (SANY ) SANKYO CO LTD
                                                                                                             2003-313261/30.
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                                                                                                                                           Yasumo H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 16;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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0,

Judging relative onset risk of diabetes including type I or II diabetes and renopathy with or without type II diabetes accompanying, by detection

Example 2; haplotype with

SEQ

ID NO 20; 157pp; Japanese

gene

polymorphism from human

genomic DNA

detecting

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RESULT 1700
ADL24993/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC The invention relates to a method of judging the onset risk of diabetes CC comprising detecting a haplotype consisting of gene polymorphism at 1 or CC more positions selected from (a)- (h) from a specimen containing human CC genomic DNA supplied by a patient: (a) the nucleotide located at position 36 of the intron 1 on GFAT1 (glutamine:fructose-6-phosphate amide CC transferase 1) gene (nucleotide number 632 in sequence ADD71329; (b) the CC (nucleotide located at position 7 of the intron 11 on GFAT1 gene (nucleotide located at position -147 of the intron 12 on GFAT1 gene (nucleotide number 336; (c) the nucleotide located at position ron the nucleotide located at positions 1853-1877 of CC sequence ADD71331; (d) the nucleotide numbers 3360 in sequence CC ADD71332; (e) the nucleotide located at positions 1988-2007 of the intron 12 on GFAT1 gene (nucleotide numbers 328-347 in sequence ADD71333; (f) CC the nucleotide located at position -11 to -22 of the intron 18 on GFAT1 gene (nucleotide numbers 225-264 in sequence ADD71334; (g) the nucleotide considers 237-266 in sequence ADD71335; and (h) the nucleotide located at positions 2632-2661 of the intron 3 on GFAT1 gene (nucleotide number 225 in CC sequence ADD71351). The method is useful for judging relative onset risk of diabetes accompanying. This sequence represents a PCR primer used CC in the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                               inflammatory bowel disease; glutenenteropathy; infectious disease; autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus; immune system disorder; hypersensitivity; anaphylaxis; blood group incompatibility; ss; human; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL24993 standard; DNA; 20 BP
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                                                                                                            04-APR-2001; 2001US-0281416P
                                                                                                                                                                             04-APR-2002; 2002WO-US010873
                                                                                                                                                                                                                                                                                               WO200280852-A2
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        intestinal epithelium cell development; peyer's patch M cell development;
inflammatory bowel disease; glutenenteropathy; infectious disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-2004
                                                          (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     778
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   2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              epithelium/peyer's patch M cell-associated PCR primer #138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 8
Byrne D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.6%;
   O' mahony
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 T; 0 U; 0 Other;
   2
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   Evans
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Novel isolated or purified polypeptide encoded by genes associated with intestinal epithelium or M cell development, differentiation or function useful for treating autoimmune diseases and infectious diseases.

function

Disclosure;

SEQ

ID NO 503; 152pp; English

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RESULT 1701
ADO81026/c
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Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention comprises DNA sequences which are associated with intestinal epithelium and peyer's patch M cells. The DNA sequences of the invention are useful for assessing, modifying, modulating or regulating intestinal epithelium or M cell development. The DNA sequences of the invention are also useful in the treatment of: inflammatory bowel disease, glutenenteropathy, infectious diseases, autoimmune diseases (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's disease, multiple sclerosis, allergy, asthma and diabetic mellitus), diseases or disorders of the immune system, hypersensitivity, diseases or disorders of the immune system, hypersensitivity, anaphylaxis, and blood group incompatibility. The present DNA sequence represents a PCR primer that was used to amplify an intestinal epithelium/peyer's patch M cell-associated DNA sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene typing; polymorphic microsatellite loci; PML; disease predisposition; microsatellite marker; prion disease; cystic fibrosis; malignant hyperthermia syndrome; metabolic disease; milk protein; hormone; transcription factor; pT7-blue-vector; human;
                                                 The invention describes a method of typing (M1) a gene (I) that has one or more polymorphic microsatellite loci (PML). The method comprises PCR amplification of at least one DNA region of (I) that includes PML, using as template a DNA sample containing at least one segment of (I); and determining the length of the resulting amplicon(8). Also described are: a method of determining (M2) microsatellite markers (MM) for predisposition to a disease, associated with a gene that includes one or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADO81026 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                               Typing
                                                                                                                                                                                                                                                                                                                                     Geldermann H,
                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2002; 2002DE-01036711.
                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2002; 2002DE-01036711.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DE10236711-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human prion protein microsatellite locus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADO81026;
                                                                                                                                                                                          Example
                                                                                                                                                                                                                            Typing genes that contain polymorphic microsatellite loci, useful identifying predisposition to disease, by amplification and determ length of amplicons.
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                                                                                                                                                                                         3; Page 34; 64pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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and prediagnosis (M3) of diseases associated with gene th
ML. The method is used to identify microsatellite markers,
elated gene, that are associated with a predisposition to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polymorphic microsatellite loci;
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Pred. No.
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                                                                                    Query Match
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                                                                                                                 Sequence 41 BP; 6 A; 16 C; 9 G; 10 T; 0 U; 0 Other;
                                                                                                                                                        The invention relates to a human protein designated 10.01, containing the Phe-His aminolyase active site. Also disclosed are the encoding polynucleotide, and a method for preparing the polypeptide by DNA recombination. The application of the polypeptide is in treating arrhychmia and diabetes. Also disclosed are the antagonist against this polypeptide and its therapeutic action, and the application of the polypucleotide. The current sequence represents a human protein 10.01
                                                                                                                                                                                                                                                                                                          New human protein 10.01 containing Phe-His aminolyase active site and encoding polynucleotide, useful for treating arrhythmia and diabetes.
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                                                                                                                                                                                                                                                                             Example 7; Page 21 (disclosure); 33pp; Chinese.
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                                                                       Similarity
                                                                                                                                               probe sequence
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                         GGAGTGCAGTGGCGCAATCTTGGCTCACTGCA 682
GGGTTGCAGTGAACCAAGATTGCGCCACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATCTTGGCTCACTGC 1
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                                                        Conservative
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Pred. No.
                                                                       Score 16;
Pred. No.
                                                        Mismatches
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                                                                       2.1e+03;
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RESULT 1703

25-MAR-2003 AAQ82623;

(revised)

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RESULT 1704
AAQ82623/c
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ID AAI735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CC AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide CC sequences (I), which contain single nucleotide polymorphisms (SNPs). CC AAM53114 to AAM5329 represent peptides related to human polymorphic CC polynucleotide sequences. The sequences can be used in gene and protein them may be used in the prevention. (I) and the polypeptides encoded by CC them may be used in the prevention, diagnosis and treatment of diseases CC associated with inappropriate expression of polymorphic polypeptides. For CC deletions in a patient's genome that affect the activity polypeptides or CC deletions in a patient's genome that affect the patients own CC production of polypeptide. Additionally, (I) and its complementary CC sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and CC therefore which patients may be used as antigens in the production of polypeptides may be used as antigens in the production of polypeptides expression and activity. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 22; Conserv
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                                                                                                       AAQ82623 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polymorphic nucleic acid sequences, useful in genetic testing
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                                                                                                                                                                                                                                                                                            rcrrearcregaccrrerearcreccrece 848
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Pred. No.
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Best Local Similarity
Matches 17; Conserv
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cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequencing complex genomes, present as fragments in a cosmid library - sequencing end-specific nucleotides of each clone then correlating with spatial relationship of cosmid, esp. for mammalian chromosomes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9429486-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequences were determined from the ends of chromosome 11-specific cosmids by automated sequencing without intermediate subcloning. A sample of 371 DNA sequence fragments were determined and of these, 277 were suitable for STS primer prediction by computer analysis (using the "Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Page 90; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUN-1993;
07-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-DEC-1994
                                                                                                                                                                                                                                                                                 04-AUG-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                         Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SALK ) SALK INST BIOLOGICAL STUDIES
                                                                                                                                       aggregate;
                                                                                                                                                                    Analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1995-036508/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                         transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTCACCGAGGCTGAAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTCACCCAGGCTGGAGT 655
                                                                                                                                                                    gene expression; reverse transcription; primer; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith MW
                                                                                                                                          restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (locus D11S964)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93US-00078471.
93US-00117952.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                         primer
                                                                                                                                          enzyme;
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                                                                                                                                                                                                                            used
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                            in cDNA analysis technique.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ν.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 19;
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RESULT 1706
AAQ95836
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A method for the analysis of cDNA comprises (a) preparing an aggregate double-stranded cDNAs by using an aggregate of mRNAs and a plural type labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in seperate lanes. The method can be used to analyse gene expression rapidly and easily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Analysis of cDNA and gene expression -
by digestion with restriction enzymes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-APR-1993;
                                             Kit for automated genotyping contg. pairs of PCR primers - designed to amplify polymorphic nucleotide repeat sequences, arranged in sets each with a characteristic fluorescence label, useful e.g. in detection of disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                 primer; polymerase chain reaction; PCR; linkage study; locus;
microsatellite marker sequence; automated genotyping; allele;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            method can be used to analyse gene expression rapidly and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 5; llpp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-018287/03
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                                                                                                                WPI; 1995-215278/28.
                                                                                                                                      Levitt RC
                                                                                                                                                                                        03-DEC-1993;
                                                                                                                                                                                                                                           08-JUN-1995
                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                     polymorphism;
                                                                                                                                                                                                                                                                                                                                                                         Primer B (Group 10,
                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ95836;
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                        Disclosure; Fig 7J-3; 104pp; English.
                                                                                                                                                                                                                 05-DEC-1994;
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                                                                                                                                                                (UYJO ) UNIV
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                                                                                                                                                                 JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                       detection; Homo sapiens; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93JP-00112515
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                                                                                                                                                                                         93US-00160837
                                                                                                                                                                                                                   94WO-US013945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         set C) for marker D13S164, chromosome
                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .7e+03;
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The method aims to

provide a collection of highly reproducible

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RESULT 1707
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The MMS are polymorphic, simple sequence repeats and can be used in automated genotyping. esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (ie. a difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 10 primer pairs are shown in AAQ95819-40. The published size range of the D13S164 allele is 208-219 bp, and the degree of heterozygosity in the population is
The sequences given in AAT10742-67 are synthetic oligonucleotides which are used in the construction of the electronically self- addressable device (ED) of the invention. The ED comprises a substrate, an electrode or opt. a number of electrodes supported by the substrate, a current source operatively connected to the electrode and an attachment layer adjacent to the electrode which is permeable to a counterion but not permeable to a molecule capable of insulating or binding to the electrode. The attachment layer is capable of attaching a macromolecule.
                                                                                                                                                                                                                                                                           Electronically self-addressable device e.g. nucleic acid hybridisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-SEP-1996
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                                                                                                                                                                                                                                                                                                                                                     WPI; 1996-097582/10
                                                                                                                                                                                                                                                                                                                                                                                                   Heller MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-1995;
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                                                                                                                                                                                                                             Example 1; Page 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NANO-) NANOGEN INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  layer;
                                                                                                                                                                                                                                                                                                                                                                                                   Tu E, Evans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               self-addressable device; ED; electrode; current source;
er; permeable; counterion; genetic typing; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94US-00271882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95WO-US008570
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA;
                                                                                                                                                                                                                           155pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
"5'-amino terminus"
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Pred. No. 1.7e+03;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                   Sosnowski
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                                                                                                                               an electrode
                                                                                                                                                                                                                                                                                                    control
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Matches Query Match Best Local

17;

Conservative

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Similarity

1.6%;

Score 15.8; DI Pred. No. 1.7e 0; Mismatches

1.7e+03

DB 1;

Length 19; Indels

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Sequence 19

BP; 6 A;

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RESULT 1708
AAT66018/c
ID AAT6601
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best
                                         The invention relates to the isolation of polymorphic repeat sequences having the sequence (dC-dA)n. (dG-dT)n which can be used as genetic markers. Primers based on these sequences can be used to detect these repeats, especially for use in e.g paternity or maternity testing, human genetic analysis such as linkage analysis of genetic disease, commercial animal or plant breeding or pedigree analysis. Clones containing the repeat sequences were isolated by hybridisation of chromosome-specific phage libraries with a synthetic poly(dC-dA). (dG-dT) probe. Over 100 repeat blocks were isolated. The primers AAT65798-T66047 were used to PCF amplify the inserts from the isolated clones containing the repeat sequences. The primers AAT66018-9 were used to amplify the repeat sequence marker clone Mfd111 (AAT65782). (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The ED is used for genetic typing and comprises a number of electronically addressable locations each comprising an electrode, binding entity, such as one of these probes, attached to each of t locations capable of detecting the presence of a genetic sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        21-APR-1989;
05-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hybridisation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
18-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT66018;
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                                                                                                                                                                                                                                                  Claim 7;
                                                                                                                                                                                                                                                                               Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n using novel nucleic acid mols, as primers.
                                                                                                                                                                                                                                                                                                                              WPI; 1997-042299/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        olymorphism; repeat sequence; genetic marker; primer; amplificati CR; polymerase chain reaction; paternity; maternity; human; pedig inkage analysis; genetic disease; animal; plant; breeding; locus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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                                 field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amplify repeat sequence marker Mfd111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                        89US-00341562.
91US-00754351.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome;
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5 C; 4 G; 4 T; 0 U; 0 Other;
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Pred. No. 1.
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Matches 17
                                                                                                                              The present invention describes LRP5 (low density lipoprotein (LDL) receptor related protein, previously designated LRP-3). AAV85587 to AAV85822 represent exon primers used for obtaining LRP5 CDNA. Nucleic acid molecules (NAMS) encoding LRP5 can be used for determining if an individual is susceptible to insulin dependent diabetes mellitus (IDDM). The NAMS or proteins can be used for reducing triglyceride levels in the serum of an individual. Therapies that affect LRP5 may also be useful in the treatment of autoimmune diseases such as glomerulonephritts, diseases and disorders involving disruption of endocytosis and/or antigen presentation, cytokine clearance and/or inflammation, viral infection, pathogenic bacterial toxin contamination, elevation of free fatty acids or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's disease and cardiovascular disease. Products from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                            Todd JA, Hear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypercholesterolemia; Alzheimer's disease; low density lipoprotein; hypercholesterolemia; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                New isolated LDL-receptor related protein - used to develop products treating, e.g. elevated triglyceride levels, diabetes, autoimmune disorders, inflammation or Alzheimer's disease.
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05-JUN-1997;
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                                                                                               Sequence
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CACCATGCCTGGCTAATTT 1
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97US-0048740P
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, Merriman TR, Metzker ML, Nakagawa
                                                         1.6%;
89.5%;
                                                                                               3 C; 6
                                                                                                                      detection,
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                                                           Score 15.8;
Pred. No. 1.
                                                                                                                      diagnosis and drug
                                                Mismatches
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                                                                                                U; 0 Other;
                                                            1.7e+03
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RESULT 1710
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Best Local
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                                                                                                                                                                                               The present invention describes LRP5 (low density lipoprotein (LDL) receptor related protein, previously designated LRP-3). AAV85823 to AAV85900 represent SNP primers used for obtaining LRP5 cDNA. Nucleic acid molecules (NAMs) encoding LRP5 can be used for determining if an individual is susceptible to insulin dependent diabetes mellitus (IDDM). The NAMs or proteins can be used for reducing triglyceride levels in the serum of an individual. Therapies that affect LRP5 may also be useful in the treatment of autoimmune diseases such as glomerulonephritis, diseases and disorders involving disruption of endocytosis and/or antigen presentation, cytokine clearance and/or inflammation, tral infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV85825;
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                                                                                                                                                      pathogenic bacterial toxin contamination, elevation of free fatty acids or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's disease and cardiovascular disease. Products from the present invention
                                                                                                                                                                                                                                                                                                                                                                                     New isolated LDL-receptor related protein - used to develop products for treating, e.g. elevated triglyceride levels, diabetes, autoimmune disorders, inflammation or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Todd JA, Hess JW, (Hey P, Kawaguchi Y, Phillips MS, Twells
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05-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                          Claim 12; Page 110; 200pp; English.
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                   751 CACCACGCCTAGCTAATTT
19
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                                                                      Similarity
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                                                                                                                                           be used for detection, diagnosis and drug
                                                                                                              BP; 6
                                                        Conservative
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97US-0048740P.
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Merriman
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                                                                   1.6%;
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                                                                                                                G; 4 T; 0
                             769
                                                                    Score 15.8; DB 1;
Pred. No. 1.7e+03;
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                                                          Mismatches
                                                                                                                U; 0 Other;
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                                                                                  Length 19;
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RESULT 1711 AAV85662/c

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RESULT 1712
AAV07878
ID AAV0787.
XX
AC AAV0787.
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Best Local :
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                                                                                                                                                                                                                                                                    the treatment of autoimmune diseases such as glomerulonephritis, diseases and disorders involving disruption of endocytosis and/or antigen presentation, cytokine clearance and/or inflammation, viral infection, pathogenic bacterial toxin contamination, elevation of free fatty acids or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's disease and cardiovascular disease. Products from the present invention
                                                                                                                                                                                                                                                                                                                                                   The present invention describes LRP5 (low density lipoprotein (LDL) receptor related protein, previously designated LRP-3). AAV85587 to AAV85822 represent exon primers used for obtaining LRP5 cDNA. Nucleic acid molecules (NAMS) encoding LRP5 can be used for determining if an individual is susceptible to insulin dependent diabetes mellitus (LDDM). The NAMS or proteins can be used for reducing triglyceride levels in the serum of an individual. Therapies that affect LRP5 may also be useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated LDL-receptor related protein - used to develop products treating, e.g. elevated triglyceride levels, diabetes, autoimmune disorders, inflammation or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Todd JA, Hess JW, Caskey
Hey P, Kawaguchi Y, Merz
Phillips MS, Twells RCJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV85662;
                                                                                                                                                                                                                          Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 12;
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05-JUN-1997;
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                AAV07878
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                                          AAV07878 standard; DNA; 19
                                                                                                                                                                                                                                                         can also be
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                                                                                                                                                                                    Similarity
                                                                                                                                          CCCGGGCTCAAGCGATTCT 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 102;
                                                                                                                                                                                                                             BP; 6
                                                                                                                                                                                                                                                         used
                                                                                                                                                                       Conservative
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97US-0048740P
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, Merriman
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                                                                                                                                                                                1.6%;
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Pred. No. 1.
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Nakagawa
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kagawa Y;
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RESULT 1713
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ID AAV0682
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Best Local :
                                                                                                                                                                                                                                                                                                                                         The invention relates to aminooxy-modified(oligo)nucleotides or nucleosides which are useful as therapeutics, diagnostics, and research reagents. They may be used, e.g., for modulation of the ras gene and may be able to modulate the process of transformation from normal to malignant cell growth. They may be prepared using known methods. Inclusion of the aminooxy moietles can improve binding of oligonucleotides to complementary strands. The moieties can also provide conjugation sites useful for conjugation of useful ligands (e.g. reporter groups and groups for modifying uptake, distribution or other pharmacodynamic properties) to oligonucleotides. The present sequence represents an example of an aminooxy-modified oligonucleotide disclosed in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-FEB-1997;
30-JAN-1998;
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Key
                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 84; 131pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New aminooxy-modified oligonucleotides - which can show improved binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cook PD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          phosphorothioate; ras gene; malignant cell growth; aminooxy-modified;
nuclease resistance; reporter group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aminooxy-modified oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-DEC-1998
                       Synthetic
                                               oligonucleotide;
                                                                          Oligonucleotide
                                                                                                   13-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to complementary strands and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-568232/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-AUG-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                            AAV06820;
                                                                                                                                                     AAV06820 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-)
                                                                                                                                                                                                                                           427
                                                                                                                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                               TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Manoharan M,
                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-00016520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-US002405
                                                                          containing
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "5-methyl, 2'-aminooxyethoxy-thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                  88
                                                                                                                                                     DNA; 19
                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kawasaki
                                                                                                                                                     В₽
                                                                           modified internucleotide linkage
                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                               Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       improved resistance
                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ¥
                                                                                                                                                                                                                                                                                 .7e+03
                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to nuclease.
                                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                    Gaps
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RESULT 1714
AAX81316
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Best Local (
                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates, inter alia, to a method of preparing an oligonucleotide by coupling (1) a new nucleoside having a protected 5'-hydroxy group and at the 3'-position a group of formula -CH2-P(OR3)-NR4R5, with (2) a nucleoside or oligonucleotide having a free 5'-hydroxy group, to give (3) a precursor having an internucleoside linkage of formula -CH2-P(OR3)-O-; and converting this to a linkage of formula -CH2-P(OR3)-O- (where X = S or O). The present sequence is a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                        Microelectronic device; multi-step reaction; microscopic format; ion-permeable permeation layer; electrode; electrical control; transport; attachment; binding; DNA/RNA hybrid; probe; ss.
                                                                                                                                                                                                                                                      AAX81316 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        example of an oligonucleotide so prepared
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oligo:nucleotide(s).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New tetra:hydro:furan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-052233/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Collingwood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JUN-1997;
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                                                                                                                                                                                     5' amino oligonucleotide probe
01-DEC-1998;
                     17-JUN-1999
                                                                                                                     Synthetic
                                                                                                                                                                                                          20-AUG-1999
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                                           WO9929711-A1
                                                                                     misc_feature
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                                                                                                                                                                                                                                                                                                                                                      l Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                            TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                             TTTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SP,
                                                                                                                                                                                                                                                                                                                                                                                                 BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 29; 37pp;
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                          (first entry)
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 98WO-US025475
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/note= "these T residues are formed as part of a
conventional phosphoramidite oligonucleotide synthesis
process but using as the reactant a thymosine nucleoside
having at the 3'.position a group of formula -CH2-
P(OCH2CH2CN)-N(1Pr)2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16.
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                                                                                                Location/Qualifiers
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                                                               'note= "amino group attached at
                                                                                                                                                                                                                                                                                                                                                                                                  Þ
                                                                                                                                                                                                                                                                                                                                                                1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                  0 C; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          derivatives
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                                                                                                                                                                                                                                                       ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English
                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                   G; 19 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Altmann
                                                                                                                                                                                                                                                                                                                                                                   Score 15.8; DB 1; Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                  Pred.
                                                                                                                                                                                       T-2.
                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful
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                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
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                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthesis
                                                                 terminal"
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control matrices and matrices of this inventions is played by the ion concernable permeation layer which overlies the electrode. This permeation concernable permeation layer which overlies the electrode. This permeation concernable permeation layer which overlies the electrode. This permeation concernable permeation layer allows attachment of nucleic acids to permit immobilization but concernable attached to settone and hybridized target DNA contends from the highly reactive electrochemical environment generated contends and fabricated to actively carry out and control reactions such concernation, diagnostics and biopolymer synthesis. The device can concentrated to actively carry out and control reactions contends and the transport and attachment of specific microconcernable contends and polypeptides, to specific microconformallytes or reactants at the addressed specific microconformallytes or reactants at the addressed specific microconcernate analytes and reactants, remove non-conformallytes and reactants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₹,
05-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The specification describes a self-addressable, self-assembling microelectronic device which is designed to actively carry out \varepsilon control multi-step and multiplex molecular biological reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-385567/32
    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New microelectronic device designed to carry and multiplex molecular biological reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (NANO-) NANOGEN INC.
                                                                                           sequence represents a probe used to exemplify the
    19
BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Butler
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    0 A;
    0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            검
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nerenberg MI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      out and control multi-step in microscopic format.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Heller MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Edman CF;
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Query Match
Best Local
                           Matches
             427
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                           17;
                                   Similarity
       TTTTATTTTATTTTTTT 445
TTTTTTTTTTTTTTTTTT 19
                           Conservative
                                  1.6%;
                           0;
                                  Score 15.8;
Pred. No. 1.
                             Mismatches
                                    7e+03
                                         DB 1;
                             2
                                          Length
                             Indels
                                            19
                             0
                             Gaps
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RESULT 1715
AAX36671/c
                                                                                                                      presymptomatic glaucoma; symptomatic glaucoma;
                                                                                                                                PCR primer; detection; chromosome 2; chromosome
                                                                                                                                                                                                           .671/c
AAX36671 standard; DNA; 19
                         30-SEP-1997;
                                           29-SEP-1998;
                                                            08-APR-1999.
                                                                              WO9916899-A2
                                                                                            Homo sapiens
                                                                                                      Synthetic
                                                                                                                                                         PCR primer for marker D6S967.
                                                                                                                                                                          13-JUL-1999
                                                                                                                                                                                            AAX36671;
                                                                                                                                                                           (first entry)
                                                                                                                                 chromosome
                          97CA-02217097
                                            98WO-CA000924.
                                                                                                                               glaucoma allele; haplotype analysis; human; GLC1B;
me 6; GLC6p25; haplotype profile;
                                                                                                                                                                                                              ВP
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(UYLA-) UNIV LAVAL

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Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          glaucoma comprising haplotype analysis of human chromosome 2 and 6 respectively, where the haplotypes are associated with loci GLC1B and GLC6p25 respectively. The primers are used to amplify gene sequences to generate information necessary to compile haplotype profiles The haplotype profiles can be used to detect presymptomatic and symptomatic glaucoma. They can also be used to localise, isolate and identify the GLC1B and GLC6p25 loci so that detection of individuals with glaucoma is enhanced. The haplotype analyses also provide means for identification and following of mutant alleles in pedigrees or populations. Identification of presymptomatic individuals using the methods allows intervention in the disease process and obviates the impact of inheriting a mutant allele causing disease, by medically disrupting the initiation or progression of the disease
                                                                                                                                                                                                                                                                                                                                                                                       Enzyme-specific cleavable polynucleotide substrate; quenched fluorescent moiety; biological assay; detection; identification; microorganism; sterilization assurance; nuclease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents a PCR primer used in the method of the invention. The method is for detecting the presence of alleles for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-263704/22
                 15-JUL-1999
                                                W09935288-A1
                                                                                                                        modified_base
                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                            Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX81927;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX81927 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polynucleotide strand with amino groups.
                                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        634 ACTCTGTCACCCAGGCTGG 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTGTCGCCAAGGCTGG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                             /*tag=
/note=
(dT)"
                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                          /note=
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(dT)"
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                                                                                                                                                          "amine-modified
                                                                                                                                                                                                                                                                                "amine-modified C6 derivative of deoxythymidine
                                                                                             "amine-modified C6 derivative
                                                                                                                                                                                                                   "amine-modified C6
                                                                                                             Ω
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Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                   derivative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of.
                                                                                                                                                        derivative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glaucoma
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                                                                                           of deoxythymidine
                                                                                                                                                                                                                   of deoxythymidine
                                                                                                                                                      deoxythymidine
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RESULT 1717
AAZ01358
ID AAZ0135
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pharmaceutical discovery, enzyme assays, immunoassays and other biological assays. The method provides a rapid and convenient approach for detection and identification of microorganisms. It can be adapted to sequence-dependent tests. The invention provides improved accuracy, faster detection, and overall lower cost in detection and identification of microorganisms. The presence of nuclease is measured more accurately and sensitively by red-shifting the emission wavelength from far UV region (350-400 nm) to the 500-600 nm region of the electromagnetic spectrum and reducing the effect of background signal levels of intact reagents. The present sequence is used in the course of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The specification describes an enzyme-specific cleavable polynucleotide substrate bearing quenched fluorescent moieties. The enzyme-specific cleavable polynucleotide substrate is useful in biological assays for detection and identification of microorganisms, sterilization assurance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  An enzyme-specific cleavable polynucleotide substrate bearing quenched fluorescent moieties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-JAN-1998;
                                                                               22-DEC-1997;
09-SEP-1998;
                                                                                                                                                 01-JUL-1999.
                                                                                                                                                                                                                                                       PG1 gene; biallelic marker; PCR primer; PG1-related biallelic marker; cancer; prostate cancer; diagnosis; therapy; prostate specific antige
                                                                                                                                                                                                                                                                                                  PCR primer for PG1 biallelic marker 4-4-187.
                                                                                                                                                                                                                                                                                                                                                        AAZ01358;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 20; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-419356/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wei A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-AUG-1998;
WPI; 1999-405178/34
                         Cohen D,
                                                                                                                                                                          WO9932644-A2
                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                             PSA; human; ss.
                                                                                                                                                                                                                                                                                                                               27-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                  AAZ01358 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the invention
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                                                                                                                      22-DEC-1998;
                                                                                                                                                                                                    Homo sapiens.
                                                    (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               427
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                         Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 0 A; 0 C; 0 G; 19
                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                               97US-00996306
98US-0099658P
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                                                                                                                        98WO-IB002133
                                                                                                                                                                                                                                                                                                                                                                                   DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89.5%;
                          Chumakov
                                                                                                                                                                                                                                                                                                                                                                                   ВP
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Pred. No. 1
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                         Bougueleret
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sterilization assurance,
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RESULT 1718
AAZ61390
ID AAZ6139
XX AAZ6139
XX I9-JUN-
XX Uniform
XX Oligome
KW Oligome
KW Oligome
KW Coligome
KW C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          at a PG1-related biallelic marker. The methods can be used to detect and to assess the risk of developing cancer or prostate cancer. Early-stage diagnosis of prostate cancer relies on prostate specific antigen (PSA) dosage. However, the effectiveness of this is limited due to its inability to discriminate between malignant and non-malignant affections of the organ. A need exists for both a reliable diagnostic procedure which would enable early-stage diagnosis, and for preventative and curative treatments of the disease. The PG1 gene can be used for detection of prostate cancer, and the risk of developing it in the future, and can also be used to determine therapies for the disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a mammalian PG1 gene and protein, and a set of PG1 biallelic markers. The PG1 polynucleotide and biallelic markers are used in a hybridisation assay, a sequencing assay, or in an allelespecific amplification assay for determining the identity of a nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        detection of prostate cancer, and the risk of develor
future, and can also be used to determine therapies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligomeric compound;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JUN-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Uniform phosphodiester oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified_base
                       Manoharan M,
                                                                                                                07-AUG-1998;
                                                                                                                                                             06-AUG-1999;
                                                                                                                                                                                                         17-FEB-2000
                                                                                                                                                                                                                                                 WO200008044-A1
                                                                                                                                                                                                                                                                                                                                        modified_base
                                                                      (ISIS-) ISIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prostate cancer associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             resistance;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                      PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       374;
                         Cook PD;
                                                                                                                  98US-00130566
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17
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/note=
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19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2'-O-modified ribosyl nucleoside; 3' endo geometry;
phosphodiester; ss.
                                                                                                                                                                                                                                                                                                                                                                                                         b
"2'-modified'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
"2'-modified
                                                                                                                                                                                                                                                                                                                                                               "2'-modified
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"2'-modified T"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene and biallelic markers derived
                                                                                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                 널
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 19
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RESULT 1719
AAZ61404
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleosides include ring structures that position the sugar moiety of the nucleosides preferentially in 3' endo geometries. The modified oligomeric compounds have increased binding affinity and increased nuclease resistance. The oligomeric compounds can be used in diagnostic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents an uniform phosphodiester oligonucleotide. The specification describes oligomeric compounds containing 2'-O-modified ribosyl nucleosides. The 2'-O-modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel 2^{\prime}-O-aminoethyloxyethyl modified nucleosides and oligonucleotides used in diagnostic, therapeutic and research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-205668/18
                                                                         Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides used in diagnostic, therapeutic and research reagents.
                                                                                                                 WPI; 2000-205668/18.
                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligomeric compound;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-JUN-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  therapeutic
                                                                                                                                         Manoharan M,
                                                                                                                                                                                            07-AUG-1998;
                                                                                                                                                                                                                      06-AUG-1999;
                                                                                                                                                                                                                                              17-FEB-2000
                                                                                                                                                                                                                                                                          WO200008044-A1
                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                nuclease
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                                                                                                                                                                   (ISIS-) ISIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                     PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                         Cook PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ribosyl oligonucleotide with phosphodiester linkages.
                                                                                                                                                                                             98US-00130566
                                                                                                                                                                                                                       99WO-US017895
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                                                                                                                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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/note= "2'-O-[2-N,N-dimethylaminoethyl)oxyethyl-5- methyl
                                                                                                                                                                                                                                                                                                                                                        /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                               2'-O-modified ribosyl nucleoside;
phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 C; 0 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60pp; English.
                                                                                                                                                                                                                                                                                                                                                         "nucleosides linked by phosphodiester linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
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Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               endo geometry;
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The present sequence represents an oligomeric compound containing 2'-O-modified ribosyl nucleosides. The oligomeric compound contains phosphodiester linkages. The 2'-O-modified nucleosides include ring

Disclosure; Page 51; 60pp; English.

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RESULT 1721
AAZ95241
ID AAZ9524
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AAC62422
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Best Local S
Matches 17
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Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             structures that position the sugar moiety of the nucleosides preferentially in 3' endo geometries. The modified oligomeric componer increased binding affinity and increased nuclease resistance. oligomeric compounds can be used in diagnostic, therapeutic and response to the sugar properties of the sugar properties of the sugar properties of the sugar models.
                                                                                                                                                                                    The present invention is concerned with methods of determining the nuclease stability of oligomeric compounds using capillary-gel electrophoresis and laser-induced fluorescence. The methods are us the polymerase chain reaction (PCR), molecular cloning and disease diagnosis and treatment. The present sequence was used in a demons:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecular
                                                                                                                                                                                                                                                                                           Determining the nuclease stability and relative binding affinity of an oligomeric compound comprises capillary gel electrophoresis using laser-
                                                                                                                                                                                                                                                                                                                                                      Leeds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T19 diester
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                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                          Example 3; Col 19-20; 14pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                          20-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                  fluorescence.
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                                                                       TTTTTATTTTATTTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                     Cummins LL;
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                                                                                                        Conservative
                                                                                                                                                   BP; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nuclease stability assay; polymerase chain reaction; pning; disease diagnosis; disease treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                            of the invention
                                                                                                                                                                                                                                                                                                                                                                                                   99US-00234237
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                                                                                                                                                   Α,
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                                                                                                                   1.6%;
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                                                                                                                                                   0 C; 0
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                                                                                                                                                   G; 19 T; 0 U; 0 Other;
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Pred.
                                                           19
                                                                                                                 Score 15.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     stability assay.
                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15.8; DB 1;
No. 1.7e+03;
                                                                                                                .7e+03
                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1,
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                                                                                                                            Length 19
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                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19;
                                                                                                        0;
                                                                                                                                                                                      demonstration
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and research
                                                                                                                                                                                                            are useful
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AAZ95241 standard; DNA; 19

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RESULT 1722
AAZ95240
ID AAZ9524
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AC AAZ9524
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AC AAZ9524
XX
OF JUN-
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                        This sequence represents a modified oligonucleotide used in the course of the invention. The invention relates to oligonucleotides comprising nucleotides covalently linked together by internucleotide linkages where at least 1 nucleotide is linked to adjacent nucleotide by a 2',5-internucleotide is allowed to adjacent nucleotide by a 2',5-internucleotide by a 2',5-internucleotide by a 2',5-internucleotide in gene therapy and are also useful in antisense methodologies, diagnostics, therapeutics and as research reagents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel modified oligonucleotides, useful in antisense methodologies, diagnostics, therapeutics and as research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2000
   05-JUN-2000
                                                                                                                                                                                                                                                                                           Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-182445/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               research
                                   AAZ95240;
                                                                     AAZ95240 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 54; Page 59;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JUL-1998;
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                                                                                                                                                                                         TTTTTATTTATTTTTTT
                                                                                                                                                                                                                                                                                           BP; 0 A; 0 C; 0 G; 18 T; 1 U;
                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "Optionally
(2-methoxyethy1)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= d
/note= "Optionally
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                                                                     DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 19
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                                                                                                                                                                                                                                           84.2%;
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                                                                                                                                                                                                                           Score 15.8; DB 1;
Pred. No. 1.7e+03;
1; Mismatches 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           internucleotide linkage"
                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                               1.
                                                                                                                                                                                                                                                             Length
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                                                                                                                                                                                                                                                               19;
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RESULT 1723
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ID AAA0683
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide; phosphorothioate; research reagent; therapeutic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified oligonucleotide
                                                                                                                                                                                                                                                                                                                                               This sequence represents a modified oligonucleotide used in the course of the invention. The invention relates to oligonucleotides comprising nucleotides covalently linked together by internucleotide linkages where at least 1 nucleotide is linked to adjacent nucleotide by a 2'.5'.
                                                                                                                                                                                                                                                                                    Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                            Example 54; Page 59; 75pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnostics, therapeutics and as research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel modified oligonucleotides, useful in antisense methodologies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-182445/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-JAN-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
 Modified nucleoside; aminooxy group;
2'-deoxy-erythro-pentofuranosyl sugar moiety; nuclease resistant;
hybridisation; binding affinity; ss.
                                                                                                                                                                                                                                                                                                         internucleotide linkage and bears a 3'-substituent. The oligonucleotides can be used in gene therapy and are also useful in antisense methodologies, diagnostics, therapeutics and as research reagents
                                                  Modified T-containing oligonucleotide,
                                                                                                                         AAA06839 standard;
                                                                           19-JUN-2000
                                                                                                                                                                                                            427
                                                                                                                                                                                                                                    1 Similarity
17; Conserv
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                                                                                                                                                                                                    TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                     BP; 0 A;
                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PHARM INC
                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cook PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-00115043
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/note= "Optionally
linkages"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "Optionally all 3'-O-(2-methoxyhexyl) or
(2-methoxyethyl)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        *tag=
                                                                                                                         DNA; 19 BP
                                                                                                                                                                                                                                                                                     0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                              89.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #3 ISIS # 22110.
                                                                                                                                                                                                                                                                                                                                                                                                              English.
                                                                                                                                                                                                                                    0;
                                                                                                                                                                                      19
                                                                                                                                                                                                                                                  Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         phosphorothicate internucleotide
                                                   SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               internucleotide linkage"
                                                                                                                                                                                                                                                              DB 1;
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                                                     NO:14.
                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                                                                                       Indels
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AAA88952
ID AAA8
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CC oligonucleotides wherein at least some of the nucleotides are
CC functionalised to be nuclease resistant, at least some of the nucleotides
CC include a substituent that potentiates hybridisation of the
CC oligonucleotide to a complementary strand, and at least some of the
CC oligonucleotide to a complementary strand, and at least some of the
CC oligonucleotide a 2'-deoxy-crythro-pentofuranosyl sugar moiety. The
CC provides for improved binding of such oligonucleotides
CC provides for improved binding of such oligonucleotides to a complementary
CC strand. The oligonucleotides of the invention aare used as diagnostic,
CC therapeutic or research reagents, and can be used to modulate gene
CC expression in organisms. The oligonucleotides containing the modified
CC nucleosides have increased nuclease resistance and increased binding
CC oligonucleotide containing nucleotides substituted with a 2'-O-{2- [N-(2-
amino)ethyl-N-(methyl)]aminooxyethyl} group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                 Oligonucleotide; nuclease resistance; dermatological; cytostatic; virucide; diagnosis; DNA-RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to aminooxy-modified nucleosides oligonucleotides and to oligonucleotides that elicit R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aminooxy-modified nucleosides and oligonucleotides useful in diagnostic, therapeutic and research reagents and for modulating the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-224020/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-AUG-1998;
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Synthetic
                                                                                                                                                                                                                                                                            Oligonucleotide ISIS 22115
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA88952;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA88952 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 0 A; 0 C; 0 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 99; Page 120; 195pp; English
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                                                                                                                                                                                                                                                                                                                                                                  05-MAR-2001
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/note= "These nucleotides are substituted with 2'-0-{2-
/note= "The substituted are substituted 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prakash TP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kawasaki AM;
                                                                                                                                          psoriasis; antipsoriatic;
antibacterial; fungicide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    es and
RNase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for cleavage
                                                                                                                                               therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                             Query Match
Best Local S
Matches 17
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modified_base
                                                                                                                             oligonucleotide ISIS 22115 contains a mixed phosphodiester and phosphorothioate backbone and has 2'-O-(2-methoxyethyl) Chemistry. It was used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the stability of oligonucleotides. Novel oligonucleotides of the invention have both A-and B-form conformational geometry. The A-form geometry modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections, and in various
                                                                                                                                                                                                                                                                                                    New oligonucleotides containing sequences with A and B geometry, treat and diagnose e.g. psoriasis, skin cancers and viral, fungal bacterial infections, bind to single stranded RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified_base
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                                                                                             Sequence 19 BP; 0 A; 0 C; 0
                                                                                                                                                                                                                                                                              Example 54; Page 69; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-MAY-2000; 2000WO-US011913.
                                                                                                                    diagnostic applications
                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                        2000-672833/65.
                      427
ш
                                                          Similarity
               TTTTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                             ĭ.
                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                              Mohan
                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00303586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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/label=
19
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mod.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= d
mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mod_base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note= "2'-0-(2-methoxyethyl)uridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note= "2'-0-(2-methoxyethyl)thymidine'
                                                        1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            base= OTHER
== "2'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e
RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "2'-0-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "phosphorothioate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER
                                             0;
                                                                                             G; 19 T; 0 U; 0 Other;
19
                                                          Score 15.8;
Pred. No. 1.
                                                Mismatches
                                                        .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linkage'
                                                                        DB 1;
                                                                    Length 19;
                                              Indels
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AAA88965

standard;

19

ВP

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427

Matches Query Match Best Local

Similarity

1.6%;

Conservative

<u>.</u> 445

Pred. No. Score 15.8; Mismatches

1.7e+03 DB 1;

Length Indels

19;

0

Gaps

0;

Sequence 19

BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

RESULT 1725 AAA88965

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geometry modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide;
dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2'-Modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAR-2001
                                                                                                  This sequence represents 2'-modified chimeric oligonucleotides containing 2'-modified T. The nucleotides were used to examine the effects of the modifications on nuclease resistence. Novel oligonucleotides of the invention have both A- and B-form conformational geometry. The A-form
                                                                                                                                                                                         New oligonucleotides containing sequences with A and B geometry, used treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and bacterial infections, bind to single stranded RNA or DNA.
                                                                                                                                                                                                                                                                      Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                             09-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA88965;
                                                                                                                                                                  Example
                                                                                                                                                                                                                                                                                                                         03-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                  03-MAY-2000; 2000WO-US011913
                         and in various
                                                                                                                                                                                                                                                                                                                                                                                                     WO200066609-A1
                                                                                                                                                                                                                                                                                               (ISIS-) ISIS
                                                                                                                                                                  86; Page 102; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chimeric oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                PHARM INC
                                                                                                                                                                                                                                                                    Mohan V;
                                                                                                                                                                                                                                                                                                                          99US-00303586.
                      diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; nuclease resistance;
cytostatic; virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*Icdy // Tcdy // Tcdy // Tcdy // Tcd/ base= OTHER // note= "2'-modified thymidine, i.e. // note= "2'-ara-(OMe)" // '-ara-(OMe)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod base= OTHER
/mote= "2'-modified thymidine, i.e.
/note= "2'-modified thymidine, i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'-modified thymidine, i.e.
(F), 2'-ara-(OH), -2'-ara-(OMe)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-modified thymidine,
/note= "2'-ara-(OH), -2'-ara-(OMe)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q.
                      applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        psoriasis; antipsoriatic;
antibacterial; fungicide;
                                                                                                                                                                                                                                                                                                                                                                                                                                    1.e.
                                    and fungal infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                            -S-Me,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -S-Me,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -S-Me,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -S-Me,
                                                                                                                                                                                                                                                                                                                                                                                                                                            -Me,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -Me,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                            2'-ara-
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RESULT 1726
AAA88949
                               Oligonucleotide ISIS 22112 contains a phosphorothioate backbone and has 3'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the stability of oligonucleotides. Novel oligonucleotides of the invention have both A- and B-form conformational geometry. The A-form geometry modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for NNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dermatological; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA88949;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA88949 standard;
                                                                                                                                                                                          New oligonucleotides containing sequences with A and B geometry, used treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and bacterial infections, bind to single stranded RNA or DNA.
                                                                                                                                                                                                                                              WPI; 2000-672833/65.
                                                                                                                                                                                                                                                                                                                     03-MAY-1999;
                                                                                                                                                                                                                                                                                                                                             03-MAY-2000; 2000WO-US011913
                                                                                                                                                                                                                                                                                                                                                                     09-NOV-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide;
                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                              (ISIS-) ISIS
                         in various diagnostic
                                                                                                                                                                                                                                                                    Σ
                                                                                                                                                                      Page 69; 132pp; English
                                                                                                                                                                                                                                                                                               PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                    Mohan V;
                                                                                                                                                                                                                                                                                                                     9908-00303586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , nuclease resistance; psoriasis; antipsoriatic;
cytostatic; virucide; antibacterial; fungicide; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISIS 22112
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note=
19
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17
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/mod_base=
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/mod_base=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
= "3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1se= OTHER
"3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "3'-0-(2-methoxyethyl)thymidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "phosphorothioate
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                         applications
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linkage'
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Sequence 19 BP; 0 A; 0 C;

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19 T; 0 U; 0 Other;

Oligonucleotide ISIS 22113 contains a phosphorothicate backbone and has 2'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the

Example

54; Page 69; 132pp;

English.

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RESULT 1727
AAA88950
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Best Local S
Matches 17
S
                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide; nuclease resistance; dermatological; cytostatic; virucide; diagnosis; DNA-RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA88950;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA88950 standard; DNA; 19
                                                                                                                                                                                                                         misc_RNA
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                                                                                                                                                                                                                                                                                                                                    modified_base
                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                         New oligonucleotides containing sequences with A and B geometry, used treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and bacterial infections, bind to single stranded RNA or DNA.
                                                                       WPI;
                                                                                                                  03-MAY-1999;
                                                                                                                                 03-MAY-2000; 2000WO-US011913
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                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                  modified_base
                                                                                    Manoharan M,
                                                                                                   (ISIS-) ISIS
                                                                                                                                               09-NOV-2000
                                                                                                                                                                                                   modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                       2000-672833/65
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                                                                                                    PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                     Mohan
                                                                                                                   9905-00303586
                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .19
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                                                                                                                                                                                                                                                                                    /note= "2'-0-(2-methoxyethyl)thymidine"
17
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/label=
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/mod_base=
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                                                                                                                                                                                                                                                                                                         *tag=
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:e= "2'
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                                                                                                                                                                                                                                                                                                  base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                        22113
                                                                                                                                                                                                                                                                                                                       "phosphorothicate
                                                                                                                                                                                                          RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽₽
                                                                                                                                                                                                                                OTHER
-O-(2-methoxyethyl)thymidine'
                                                                                                                                                                                                                                                                    OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                              (2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                  psoriasis; antipsoriatic;
antibacterial; fungicide; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.7e+03
                                                                                                                                                                                                                                                                                                                        linkage"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             stability of oligonucleotides. Novel oligonucleotides of the invention have both A- and B-form conformational geometry. The A-form geometry modulates the binding affinity and nuclease stance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19
New oligonucleotides containing sequences with A and B geometry, u treat and diagnose e.g. psoriasis, skin cancers and viral, fungal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic; dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide ISIS 22114
                                                                                                                         03-MAY-2000; 2000WO-US011913
                                                                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                        dermatological; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA88951 standard;
                                  WPI; 2000-672833/65.
                                                                                                  03-MAY-1999;
                                                                                                                                                                       WO200066609-A1
                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                               modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                             (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          conditions, skin cancers and viral, bacterial and fungal infections, in various diagnostic applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   427 TITTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTTTTTTTTTTTTTT 19
                                                       Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                              PHARM INC.
                                                       Mohan
                                                                                                    99US-00303586
                                                                                                                                                                                                                   '*tag= c
/mod_base= OTHER
/note= "3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                            /*tag=
/mod_ba
                                                                                                                                                                                                                                                                                                                                                                  /note=
16
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                          _base= OTHER
e= "3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                            _base= OTHER
                                                                                                                                                                                                                                                                                   "3'-0-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                "3'-O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                                                                                                                                                                                           e
"phosphorothioate linkage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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RESULT 1729
AAA88947
ID AAA8894
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the stability of oligonucleotides. Novel oligonucleotides of the invention have both A-and B-form conformational geometry. The A-form geometry modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RWase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections, and in various
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide ISIS 22114 contains a mixed phosphodiester and phosphorothioate backbone and has 3'-O-(2-methoxyethyl) chemis
                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                              diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide ISIS 22110.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA88947;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA88947 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnostic applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 54; Page 69; 132pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bacterial infections, bind to single stranded RNA or DNA
                                           03-MAY-1999;
                                                                  03-MAY-2000;
                                                                                          09-NOV-2000.
                                                                                                                                                                       modified_base
                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                     modified_base
                                                                                                                 WO200066609-A1
                                                                                                                                                                                                                                                                                                                    modified_base
                                                                                                                                                                                                                                                                                                                                                                                         dermatological;
                   (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   427
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                                                                                                                                                                                                                                                                                                                                                                               88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 0 A; 0 C; 0
                                                                  2000WO-US011913
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                    PHARM INC
                                           9905-00303586
                                                                                                                                                                                                                                                                                                                                                                                         ; nuclease resistance; cytostatic; virucide;
                                                                                                                                                                                                                                                                          /note=
17
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                 /mod
                                                                                                                                                  mod
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                                                                                                                                                                                                                                                _mod
                                                                                                                                                                *tag=
                                                                                                                                                                                     note=
                                                                                                                                                                                                             *tag=
                                                                                                                                                                                                                                    note=
                                                                                                                                                                                                                                                            *tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89.5%;
                                                                                                                                                                                     _base=
_e= "3'.
                                                                                                                                                                                                                                                _base= OTHER
                                                                                                                                       base= OTHER
s= "3'-O-(2-methoxyethyl)thymidine'
                                                                                                                                                                                                                                                                                               base= OTHER
                                                                                                                                                                                                                                                                                    <u>ٿ</u>
                                                                                                                                                                                                                                    "3'-0-(2-methoxyethyl)thymidine"
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                                                                                                                                                                                                                                                              σ
                                                                                                                                                                                                                                                                                   -O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                      -O-(2-methoxyethyl)thymidine"
                                                                                                                                                                                                 OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.8; D
Pred. No. 1.7e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                         psoriasis; antipsoriatic;
antibacterial; fungicide; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chemistry. It was
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Manoharan M,

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RESULT 1730
AAA88948
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide ISIS 22110 contains a phosphodiester backbone and has 3'-0-(2-methoxyethyl) chemistry. It was used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the stability of oligonucleotides. Novel oligonucleotides of the invention have both A- and B-form conformational geometry. The A-form geometry modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections, and in various diagnostic applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligonucleotides containing sequences with A and B geometry, utreat and diagnose e.g. psoriasis, skin cancers and viral, fungal bacterial infections, bind to single stranded RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                        diagnosis;
                                                                                                                                                                                                                                                                                                dermatological;
                                                                                                                                                                                                                                                                                                  Oligonucleotide; nuclease resistance; dermatological; cytostatic; virucide;
                                                                                                                                                                                                                                                                                                                                 Oligonucleotide ISIS 22111
                                                                                                                                                                                                                                                                                                                                                    05-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             AAA88948 standard; DNA; 19 BP
                                                                                                           misc_RNA
                                                                                                                                                   modified_base
                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                     modified_base
                                                                             modified_base
                              WO200066609-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTTATTTATTTTTTTT
                                                                                                                                                                                                                                                                                        ical; cytostatic;
DNA-RNA hybrid; ε
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 0 A; 0 C; 0 G; 19 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 69; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                               /note=
17
                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                              /*tag= b
/mod_base= OTHER
/note= "2'-O-(2-methoxyethyl)thymidine"
                                                           /*tag=
/mod_ba
                                                                                                                                            *tag=
                                                  note=
                                                                                         label=
                                                                                                                      note=
                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.6%;
                                                                                                                                  base= OTHER
                                                                                                                                                                                                       _base= OTHER
== "2'-O-(2-methoxyethy1)thymidine"
                                                            base= OTHER
                                                 "2'-O-(2-methoxyethyl)uridine"
                                                                                                                       "2'-0-(2-methoxyethyl)thymidine"
                                                                       Ω
                                                                                          RNA
                                                                                                    Φ
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                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                         88.
                                                                                                                                                                                                                  OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                  psoriasis; antipsoriatic; antibacterial; fungicide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                  therapy
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04-FEB-1999; 09-APR-1999;

99US-0118564P. 99US-00288679. 99EP-00307066

(ISIS-) ISIS

PHARM INC

Manoharan

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Capaldi DC,

Krotz A,

Cole DL;

06-SEP-1999; 16-AUG-2000

Guzaev Ravikumar VT, EP1028124-A2

modified_base

/mod_base= OTHER /note= "phosphorothioate linkage"

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                                                                                                                                                                                                                   RESULT 1731
AAA71630
                                                                                                                                                                                                                                                                                                                                                       Matches
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modulates the binding affinity and nuclease resistance of the oligonucleotide. The B-form geometry allows the oligonucleotide to serve as substrate for RNase-H when bound to a target nucleic acid strand. The oligonucleotides can be used to treat psoriasis and other inflammatory skin conditions, skin cancers and viral, bacterial and fungal infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O-(2-methoxyethyl) chemistry. It was used in experiments to determine the effects of snake venom phosphodiesterase and liver homogenate on the stability of oligonucleotides. Novel oligonucleotides of the invention have both A- and B-form conformational geometry. The A-form geometry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligonucleotides containing sequences with A and B geometry, used treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and bacterial infections, bind to single stranded RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide ISIS 22111 contains a phosphodiester backbone and has o-(2-methoxyethyl) chemistry. It was used in experiments to determine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 54; Page 69; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-672833/65
                                Synthetic
                                                                 Phosphorothioate; primer; oligomer synthesis; antisense therapy; ss
                                                                                                 Phosphorothioate 20-mer primer DNA
                                                                                                                                                                    AAA71630
                                                                                                                                                                                                     AAA71630 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-)
                                                                                                                                     14-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                         in various diagnostic applications
                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                      l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                      TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                         TTTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Σ
                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHARM INC.
                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mohan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00303586
Location/Qualifiers
                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                       1.6%;
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                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                        Score 15.8;
                                                                                                                                                                                                                                                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                         No.
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                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
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Gaps

2000-500332/45

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AAC62454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes a novel synthetic method (M) comprising: (a) providing a sample comprising a number of oligomers of formula (I); (b) contacting the sample with a deprotecting agent to remove R t groups from the oligomers; and (c) reacting the oligomer with a cleaving reagent. The method is used to produce oligomeric compounds for use in antisense and oligonucleotide therapies. The method enables the synthesis of oligomers with a reduction in the number acrylonitrile groups attached.

Acrylonitrile has been demonstrated to be a potent carcinogen in rats. This sequence represents a phosphorothioate 20-mer primer which is used in the method of the synthesis.
         The present invention is concerned with the cleavage of nucleic acids from solid supports. This is carried out by adding a non-conventional nucleotide into the nucleic acid attached to the support, so that it is recognised and cleaved by a specific DNA glycosylase and the sequence is released. This is useful in many molecular biological procedures such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel method for the production of oligomers with reduced exocyclic adducts comprises treatment with deprotecting and cleaving reagents.
                                                                                                                                   Detaching nucleic acid molecule comprising unconventional nucleotide incorporated at predetermined site from a solid support involves cleaving the nucleic acid molecule at the site of unconventional nucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid cleavage; solid support; DNA-RNA hybrid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cleavage of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC62454 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 17; 33pp; English
                                                                                                                                                                                                                                                                                                                       05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                              misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC62454;
sequencing,
                                                                                                     Example 3; Page 34; 47pp; English.
                                                                                                                                                                                                                              (GOLD/) GOLDSBOROUGH
                                                                                                                                                                                                                                                            29-MAR-1999;
                                                                                                                                                                                                                                                                                       28-MAR-2000; 2000WO-GB001190
                                                                                                                                                                                                                                                                                                                                                   WO200058329-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      affinity chromatography; sequencing;
                                                                                                                                                                                                2000-664908/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        purification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                            99GB-00007245
                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acids from solid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                                                                                                                                                                                 Q)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mutagenesis; DNA preparation;
 cDNA and template
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      supports assay oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19;
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              sequence is
ires such as
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RESULT 1734
AAF31564
ID AAF3156
XX
AC AAF3156
XX
DT 09-APRXX

AAF31564; AAF31564

standard;

DNA;

19

ВP

09-APR-2001

(first entry)

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AAF31458
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Best Local S
Matches 16
                                          Matches
                                                      Best
                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             based assays, mutagenesis procedures, nucleic acid purification and affinity chromatography. The present sequence is an oligonucleotide used in assays to demonstrate the methods of the invention
                                                                                                                                                                                 Guanidinium functionalized oligomers prepared from units, are hybridizable with a specific RNA or DNA diagnostic and therapeutic purposes.
                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF31458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
                                                                                    Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                         diagnostic and investigative purposes
                                                                                                                   The present invention relates to nucleotide oligomers comprising monomer units. Oligomers modulate gene expression when hybridized by a single- or double-stranded nucleic acid. They are useful for gene therapy,
                                                                                                                                                                                                                                                    Manoharan M,
                                                                                                                                                                                                                                                                                               07-JUL-1999;
                                                                                                                                                                                                                                                                                                                     07-JUL-2000; 2000WO-US018609
                                                                                                                                                                                                                                                                                                                                                                 WO200102423-A2
                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                          Gene expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF31458;
                                                                                                                                                             Example 26; Page 54; 108pp; English.
                                                                                                                                                                                                                              WPI; 2001-138119/14.
                                                                                                                                                                                                                                                                                                                                          11-JAN-2001.
                                                                                                                                                                                                                                                                          (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity hes 16; Conserv
                                                     Local Similarity
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                    427
                                         17;
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            TTTTTATTTTATTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard; DNA; 19
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                                          Conservative
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                                                                                                                                                                                                                                                                                                 99US-00349040
                                                                                                                                                                                                                                                                                                                                                                                                                               SISI
                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.2%;
                                                    89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                               109989.
                                                               1.6%;
                                                                                                                                                                                                                                                     Prakash
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                                          0,
                    445
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.8;
Pred. No. 1
                                                      Pred. No.
                                                              Score 15.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                           Mismatches
                                                                                                                                                                                                                                                     Mohan
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                                                      1.7e+03
                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                           88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ب</u>
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                                                              Length 19;
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                                           Indels
                                                                                                                                                                                             sequence, useful for
                                                                                                                                                                                                       corresponding
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AAH56776
ID AAH5677
XX AAH5677
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligomers. The oligomers may be used as research redisease caused by undesired production of proteins treating AIDS and atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      undesired production atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth; microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis; Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa; antibacterial; antiviral; antiproliferative; antisense therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 46; Page 74; 110pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New oligomers for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-138117/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2000; 2000WO-US040304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200102419-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA/RNA hybrid; oligomer; C3' methylene hydrogen phosphate; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISIS sequence
                                                                                                                                                                                                                                                                                             Staphylococcus aureus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH56776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH56776 standard;
                                                                                                                                                                                                          25-MAY-2001
                                                                                                                                                                                                                                                                                                                                          microbial infection;
                                                                                                                                                              20-NOV-2000;
                                                                                                                                                                                                                                                     WO200136625-A2
                                                                         (GENE-) GENESENSE TECHNOLOGIES
                                                                                                                   18-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>س</u>
                       JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SISI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTTTTTTTTTTUUUU 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to C3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                         Young AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PHARM INC
                                                                                                                                                                2000WO-CA001347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00349033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                operon
                                                                                                                   99US-0166249P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e as research of proteins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 C; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligonucleotide SEQ ID NO:424.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Maier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8;
Pred. No. 1.
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                                                                         INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   methylene hydrogen phosphate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , for treating disease caused by diagnosing and treating AIDS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reagents, for treating and for diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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CC antisense oligonucleotides to nucleotide sequences encoding groE. More CC generally, antisense compounds (1) comprising antisense oligonucleotides of 5-50 bases targeted to a nucleotide sequence encoding groE. More CC of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat CC shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a CC microorganism, where the antisense compound is complementary to GL or GS of a microorganism and specifically hybridises with and inhibits the CC expression of GL or GS, is claimed. (I) have antibacterial, antiviral and CC for inhibition expression of GL or GS in cells or tissues in vitro. (I) are also useful for inhibiting the growth of a microorganism, or inhibiting the expression of GL or GS gene in a microorganism, or inhibiting the expression of GL or GS gene which involves administering to the microorganism or to a cell infected with the microorganism, (I). (I) are also useful for treating a mammalian pathological condition mediated by microorganisms having a GL or GS gene which involves administering to the having a pathological condition mediated by microorganisms having a GL or GS gene and administering (I) such that the growth of microorganism is consisted. The antisense compounds are utilised for diagnostics, therapeutics, prophylaxis and as research reagents and kits, e.g., to prevent or delay microbial infections in humans. They are also useful as molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854 cemplification of the present invention. AAH56855 to AAH56870 represent CC exemplification of the present invention. AAH56855 to AAH56870 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compounds targeting nucleic acid encoding groEL or gene of microorganism, which hybridize with and inhibit expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genes, useful to inhibit growth of microorganism having the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ψРІ; 2001-355633/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Page 52; 110pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genes.
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of the
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Matches Query Match Local 604 TTATTTTTAATTTTTTGAG 622 \vdash l Similarity 17; Conserv TTATTTCAACTTTTGAG 19 Conservative 1.6%; ٥, Score 15.8; Pred. No. 1 Mismatches .7e+03; DB 1; 2 Length Indels <u>.</u> Gaps 0,

S

Sequence

19

BP; 4 A;

2 C; 2 G; 11 T; 0 U; 0 Other;

吊 AAH38442; AAH38442 standard; DNA; 19 14-AUG-2001 (first entry) ВP

SNP specific lower PCR primer SEQ ID 1238.

AAH38442
IID AAH3
XX
AC AAH3
AC AAH4
AC AAH4
AC Sing
XX
XX
Sing
XX
XX
XX
Sing
XX
Sing SNPE, genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; Single nucleotide polymorphism; SNP; single nucleotide primer extension; 13-OCT-2000; 26-APR-2001 WO200129262-A2 Homo inflammation; 2000WO-US028436. forensic investigation; paternity analysis; PCR primer; ss

15-OCT-1999;

99US-0160096P

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RESULT 1737
AAH39785/c
ID AAH3978
XX AAH3978
XX AAH3978
XX SNP spe
XX SNP spe
XX Single
KW SNPE; c
KW Lesch-N
KW polycys
KW acute i
KW inflamm
XX inflamm
XX W020012
XX W020012
XX FP 13-0CT-
XX 15-0CT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide CC primer extension (SNPB) primers, and the sequences of regions flanking CC sites of single nucleotide polymorphisms SNPs. The present invention CC includes kits for determining the presence or absence of a SNP, using the CC oligonucleotides of the invention. The PCR primers are used to amplify a CC SNP flanking sequence, the SNPB primer is used as a genotyping primer. CC The oligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for determining the presence, absence or CC oligonucleotides are useful for determining the presence, absence or CC identity of a SNP and for genotyping nucleic acid sample by coligonucleotides are useful for determining the presence, absence or CC assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being CC aused by one or more SNPs. Phenotypic traits include diseases e.g. CC osteogenesis imperfects and acute intermittent porphyria. Phenotypic CC traits also include symptoms of or susceptibility to multifactorial diseases of which a component is or may be genetic such as autoimmune CC disease of which a component is or may be genetic such as autoimmune inference of the matting, rheumatoid arthritis, multiple sclerosis, and concernity analysis. The method is also useful in forensic investigations and concernity analysis. The present sequence represents a PCR primer specific for a burnar, SNP containing NNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nuc
                                                                                                                                                                                                            SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Esch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                           14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ORCH-)
    15-OCT-1999;
                                         13-OCT-2000; 2000WO-US028436.
                                                                                                                               WO200129262-A2
                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                   Single nucleotide polymorphism; SNP; single nucleotide primer extension;
                                                                                                                                                                                                                                                                                                                                                               SNP specific upper PCR primer SEQ ID 2581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH39785 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248 CTCGGCCTCCCAAAGTGCT 266
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 56; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGGCCTCCCAAAGTGTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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    99US-0160096P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pohl M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesterolaemia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune disease, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and paternity analysis. The present sequence represents a PCR primer specific for a human SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                              Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPB) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPB. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The oligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic trait suspected seeses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 63; 83pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New genotyping oligonucleotide, useful for detecting the presence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ORCH-) ORCHID BIOSCIENCES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
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Ş Matches Query Match Best Local (1089 GGCGGGGTTTCACCATATT 1107 19 Similarity GACGGGGTTTCACCATGTT 1 Conservative 1.6%; 0 Score 15.8; Pred. No. 1. Mismatches .7e+03 DB 1; Length 19; Indels 0 Gaps

0

Sequence 19 BP; 6 A;

6 C; 4 G; 3 T; 0 U; 0 Other;

RESULT 1738
AAH40317/c
ID AAH40317 AAH40317 standard; DNA; 19

SNP specific upper 14-AUG-2001 AAH40317; (first entry) PCR primer SEQ ID 3113.

single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis inflammation; stic kidney disease; osteogenesis imperfecta; autoimmune disease; intermittent porphyria; rheumatoid arthritis; multiple sclerosis;

Homo sapiens.

26-APR-2001

13-OCT-2000; 2000WO-US028436.

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#X#X#X####X#X93939393939393939393939393
CC includes kits for determining the presence of a SNP, using the CC oligonucleotides of the invention. The PCR primers are used to amplify a CC symp flanking sequence, the SNPE primer is used as a genotyping primer. CC The oligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides are useful for determining the presence, absence or coligonucleotides and for genotyping nucleic acid samples, for e.g. to cases by association analysis the genotype of an individual or group of coligonucleotides, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. coligonucleotides, diabetes insipidus, Lesch-Nyhan syndrome, muscular contects and a surprise and coute intermittent porphyria. Phenotypic contects also include symptoms of or susceptibility to multifactorial contects also include symptoms of or susceptibility to multifactorial confisases, including, rheumatoid arthritis, multiple sclerosis, including, rheumatoid arthritis, multiple sclerosis, and confiscation, cancer, nervous system diseases and infection by pathogenic inflammation, cancer, nervous system diseases and infection by pathogenic confiscation, cancer, nervous system diseases and infection by pathogenic confiscations and pathogenic paternity analysis. The present sequence represents a PCR primer specific for a human SNP contration NN semicence
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1739
AAH46460
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-290930/30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-OCT-1999;
                                                                                                                                                                                                                                                                                                  Oligonucleotide
                                                                                                                                                                                                                                                                                                                                          14-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                        AAH46460 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ORCH-) ORCHID BIOSCIENCES INC.
                                                                                                                                                                                                                                                          Phosphorothioate;
                                                                         modified_base
                                                                                                                                                                                                                    Synthetic
                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTACTGCAACCTCCGCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCACTGCAACCTCTGCCT 692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                          (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 containing
                                                                                                                                                                              Location/Qualifiers
                                                             /*tag=
                     note=
                                                                                                note= "All bases
                                                                                                                                                                                                                                                            anti-viral therapy; stereochemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 C; 9 G; 3 T; 0 U; 0 Other;
                  base= OTHER
== "Modified with 2'-O-methoxyethyl"
                                                                                                                       base= OTHER
                                                               σ
                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                  are phosphorothicate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
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                                                                                                                                                                                                                                                            pathway; ss
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RESULT 1740
AAH25737
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a method for preparing phosphorothioate oligonucleotides having at least one nucleoside with a 2' modification. The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid group having at least one nucleoside with a 2' modification in an acetonitrile. The present sequence was used to illustrate the method of the present invention. The method is useful for synthesising sulphurised 2' substituted phosphorothioate oligonucleotides, which may be used in molecular biological research, in applications such as anti-viral therapy, and for determining the stereochemical pathways of certain enzymes which recognise nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Preparing sulfurized 2' substituted phosphorothioate oligonucleotides useful in biological research, comprises phosphitylating the 5'-hydrosof a nucleic acid having a nucleoside with a 2' modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2001.
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                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 12; Col 7; 7pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-JAN-2000; 2000US-00481486
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                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                               Human; RNase
                                                                                                                                                                                                                                                                        Human type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-)
                                                 WO200123613-A1
                                                                                                                     modified_base
                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                 14-AUG-2001
                                                                                                                                                                                                                                                                                                                         AAH25737;
                                                                                                                                                                                                                                                                                                                                                  AAH25737 standard; DNA; 19
                                                                                                                                                                                                                                n; RNase H type II; RNase H1 cleavage substrate; therapy; primer; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                               -
                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                       II RNase H substrate oligonucleotide #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 0 A; 0 C; 0 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                        16. .19
                                                                                                                                                                                  Location/Qualifiers
                                                                      /mod_base= OTHER
/note= "optionally
methoxyethyl)"
                                                                                                                                 note=
                                                                                                                                             '*tag= a
'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.6%;
                                                                                                                                  "optionally
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                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                    phosphorothioate backbone'
                                                                                     3'-0-(2-methoxyethyl) or 2'-0-(2-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                  antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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29-SEP-2000; 2000WO-US026729

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RESULT 1741
AAH25738
ID AAH2573
XX Human;
XXW Human;
XXW Human;
XXW Gene t
XXX Gene t
XXY Gene t
XX
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human type II RNase H substrate oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention provides a number of DNA-RNA oligonuclectides which can act as substrates for human RNase HI (a type II RNase). The sequence consists of two portions, one of which is capable of supporting cleavage of a complementary target RNA and the other of which is incapable of supporting such cleavage. These can be used to enhance the effectiveness of antisense therapies. The present sequence is an RNase H substrate used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Crooke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                        misc_RNA
                              Crooke ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 54;
                                                                                                                                30-SEP-1999;
                                                                                                                                                                                                                                  05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified_base
                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                              29-SEP-2000; 2000WO-US026729
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   meric oligonucleotides that can serve as substrates for human RNase useful for enhancing the effectiveness of antisense gene therapies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-343164/36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNase H type II; RNase H1 cleavage substrate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 88; 178pp; English.
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                                 Manoharan M;
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No. 1.
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RESULT 1742
AAC62164/c
ID AAC6216
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides a number of DNA-RNA oligonucleotides which can act as substrates for human RNase HI (a type II RNase). The sequence consists of two portions, one of which is capable of supporting cleavage of a complementary target RNA and the other of which is incapable of supporting such cleavage. These can be used to enhance the effectiveness of antisense therapies. The present sequence is an RNase H substrate used in the exemplification of the invention
                                                       patient sample. identification of the development o
                                                                                  PCR primers AAC62163-64 were used to amplify a human apolipoprotein CI (APOCI) allele. The primers are used in the method of the invention. The specification describes a method for screening for a genetic factor for having an enhanced risk of developing Alzheimer's disease. The method comprises amplifying the genomic DNA encoding an APOCI region in a patient sample. The method is useful for early screening or identification of Alzheimer's disease, and for monitoring the presence of identification of Alzheimer's disease, and for monitoring the presence of
                                                                                                                                                                                                                                                                                                                                                                                Screening for a genetic factor for having an enhanced risk of developing Alzheimer's disease (AD), useful for identifying and monitoring the presence or development of AD, by amplifying the DNA encoding an apolipoprotein CI region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAC62164 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimeric oligonucleotides that can serve as substrates for human RNase H1, useful for enhancing the effectiveness of antisense gene therapies.
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Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAR-2001
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                                                                                                                                                                                                                                                                                                                               Example 8; Col 18; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-030938/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer used to amplify a human APOCI allele fragment
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Query Match

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RESULT 1743
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RESULT 1744
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Screening for a genetic factor for having an enhanced risk of developing Alzheimer's disease (AD), useful for identifying and monitoring the presence or development of AD, by amplifying the DNA encoding an
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                           related sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and for monitoring the presence
                                                                                                                                                                                                                                                                                                                                                                                  1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                     Length
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                              215.
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RESULT 1745
AAF91127/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-1999; 99EP-00114938.
22-FEB-2000; 2000EP-00103361.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-FEB-2001.
                                                                                                                                                                                                                                                       cardiovascular disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brinkmann U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-2000; 2000WO-EP007314
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                       28-JUL-2000; 2000WO-EP007314
                                                                                                                                                                                                                                                                               Human; MDR-1; multi drug resistance-1; drug inflammatory disease; neuronal disease; CNS
                                                                                                                                                                                                                                                                                                                                  Human multi drug resistance-1
                                                                                                                                                                                                                                                                                                                                                                     04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                        AAF91127;
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF91127 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sensitivity interfering resulting from po-
lead to difficulties in treating cancer,
inflammatory and CNS diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The
the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 121; 154pp; English.
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Brinkmann U,
                                                                   30-JUL-1999;
22-FEB-2000;
                                                                                                                                                                                         WO200109183-A2
                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the human multi drug resistance-1 (MDR-1) protein. These can be identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, versulting to difficulties in treating cancer, cardiovascular, neuronalead to difficulties in treating cancer, cardiovascular, neuronalead to difficulties in treating cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EPID-) EPIDAUROS BIOTECHNOLOGIE
                                (EPID-)
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human multi
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17; Conservat
                                  EPIDAUROS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGTGATCTGCCTGCCTC 850
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention provides nucleotides encoding molecular variants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                     2000EP-00103361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hoffmeyer S,
                                                                                                                                                                                                                                                                                                                                                                       (first entry)
 Hoffmeyer
                                                                                                                                                                                                                                                                disease;
                                                                                       99EP-00114938
                                  BIOTECHNOLOGIE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9 C; 4 G;
                                                                                                                                                                                                                                                                  PCR
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   Eichelbaum
                                                                                                                                                                                                                                                                primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                    gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ed. No. 1.7e+03
Mismatches
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                                      A
G
                                                                                                                                                                                                                                                                                                                                    related sequence SEQ ID NO:
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   z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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                                                                                                                                                                                                                                                                                 j uptake;
i disease;
     Roots
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     I;
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                                                                                                                                                                                                                                                                                                     disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neuronal,
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                                                                                                                                                                                                                                                                                                                                         214.
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RESULT 1746
AAC83664
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides nucleotides encoding molecular variants of the human multi drug resistance-1 (MDR-1) protein. These can be used to identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, which can lead to difficulties in treating cancer, cardiovascular, neuronal, inflammatory and CNS diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                               2'-O-acetamido; diagnostic; kinase modulator; nuclease resistance;
tumour formation; cancer; protein kinase C expression;
cell adhesion molecule expression; multidrug resistance; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1;
                                                                                  oligonucleotides which have
                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                 02-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC83664 standard;
                                                                                               New 2'-O-acetamido modified nucleosides (I) used to produce
                                                                                                                                                                                     19-AUG-1999;
                                                                                                                                                                                                           19-AUG-1999;
                                                                                                                                                                                                                                 14-NOV-2000
                                                                                                                                                                                                                                                      US6147200-A.
                                                                                                                                                                                                                                                                                                                                                                                                            2'-O-N-[2-(dimethylamino)ethylacetamido]-modified
                                                                                                                                                                (ISIS-) ISIS
                                                                                                                     2001-069824/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001-159855/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       832 CTTGTGATCTGCCTGCCTC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                    12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 121; 154pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 5 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
                                                    င္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                 PHARM INC
                                                                         properties than
                                                                                                                                          Sook
                                                                                                                                                                                     99US-00378568
                                                                                                                                                                                                           9905-00378568
                                                    28;
                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "2'-O-N-[2-(dimethylamino)ethylacetamido]5MeU"
                                                                                                                                                                                                                                                                                    /*tag=
/mod_ba
                                                                                                                                        PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
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                                                                                                                                          Fraser
                                                   English.
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                                                                                   enhanced
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Pred. No. 1
                                                                         prior
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                                                                          art.
                                                                                                                                          Prakash
                                                                                    nuclease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                                                                                                                         ΤP,
                                                                                    resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                          Kawasaki
                                                                                                                                                                                                                                                                                                                                                                                                            oligo ISIS #32335.
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                                                                                   and
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                                                                                    superior
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The present sequence is a modified oligonucleotide. 2'-O-acetamic modified nucleosides were used to produce oligonucleotides which enhanced nuclease resistance and superior hybridisation properties.

compounds

are

leotides which have ation properties that identification or 2'-0-acetamido-

The present invention relates to a method for the qualitative and quantitative detection of targets in a sample by molecular interact between the target and probes in an array. The method can be used detect interactions between nucleic acids, antigens and antibodien

receptor and ligands,

particularly

c acids, antigens in applications s

such

96 antibodies medical

used

or S

Example

Page 47; 92pp;

German.

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AAK98526
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modulating the activity of an ribonucleic acid or deoxyribonucleic acid molecule. They have a modified nucleoside monomer and are specifically hybridisable with a preselected nucleotide sequence of a single-stranded or double-stranded target deoxyribonucleic acid or ribonucleic acid molecule. The oligomers are further useful in a ras-luciferase fusion system using ras-luciferase transactivation. They are useful in abnormal cell proliferation and tumour formation and modulation of expression of protein kinase C and cell adhesion molecules such as ICAM. They are useful in the modulation of proteins related to multidrug resistance and viral genomic nucleic acids such as HOV, herpes viruses, Epstein-Barr virus, cytomegalovirus, papillomavirus, hepatitis C virus and influenza
                                                                                                                                                                Bickel
Schulz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                 genotyping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid quantitative analysis related oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAK98526;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAK98526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          quantification of ribonucleic acid and deoxyribonucleic acid or
                                                                                                      Determining targets diagnosis, based on
                                                                                                                                        WPI; 2002-154760/20
                                                                                                                                                                                                                          01-JUL-2000; 2000DE-01033334.
                                                                                                                                                                                                                                                 02-JUL-2001; 2001WO-EP007575
                                                                                                                                                                                                                                                                                                WO200202810-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                         Target detection;
                                                                                                                                                                                                                                                                        10-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                              forensics; bacterial
                                                                                                                                                                                                  CLON-) CLONDIAG CHIP TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
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                                                                                                                                                              Ehricht R, Wagner G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                            /*tag= a
/mod_base= OTHER
/note= "modified k
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 A;
                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                            quantitative analysis; probe; medical diagnosis; ial screening; tissue typing; gene expression analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                     by interaction with detecting formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 C; 0
                                                                                                                                                                            Ellinger
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Pred. No. 1.7e
O; Mismatches
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of pre
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 Other;
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                                                                                                      obe array, useful e.g. fo
precipitate at specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
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                                                                                                                                                                             Kaiser
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Query Match
Best Local S
Matches 17
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis, forensic scie
transplantation, monitor
sequence is a modifying
the invention
                                                                         The present invention relates to methods for distinguishing between individuals homozygous for and therefore afflicted with Van Buchem's disease, individuals heterozygous for and therefore carriers of Van Buchem's disease and individuals who are not afflicted with Van Buchem's disease comprise identifying a large genomic deletion in chromosome 17 at 17q21. The method is useful for identifying individuals who are afflicted with or carriers of diseases associated with one or more genomic deletion, particularly Van Buchem's disease, which is a rare autosomal recessive disorder that results in a bone dysplasia referred to a craniotublar hypertosis. The present sequence is a PCR primer used to amplify 92Kb gene fragment in human chromosome 17 at 17q21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 0
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06-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; Van Buchem's disease; genomic deletion; craniotubular hypertosis; autosomal recessive disorder; chromosome 17; chromosome 17q21;
                                                                                                                                                                                                                                                               Methods for identifying subjects who are afflicted with or carriers of diseases associated with genomic deletion(s), e.g. Van Buchem's disease, by determining the presence of a deletion in the 92 kb region of human chromosome 17 at 17g21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200210455-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bone dysplasia; 92Kb gene fragment; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chromosome 17 92Kb gene fragment amplifying PCR primer, Wt2R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002
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                                                                                                                                                                                                                                       Example 3; Page 26; 109pp; English
                                                     Sequence
Local Similarity les 17; Conserv
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STRAEHLING HAMPTON K.
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                                                       σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sic science, bacterial screening, tissue typing for monitoring gene expression, and genotyping. The predifying oligonucleotide used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A.
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            1.6%;
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                           Score 15.8;
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RESULT 1749
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                                                                                                                                                                                                                                                                                                                                                                                   ABA91949 standard; DNA; 19
                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                Methyl thioethyl modified oligonucleotide
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                                                                                                                                                                     20-AUG-1999;
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                                                                                                                                               Manoharan
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17
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/mod_base= OTHER
/note= "2'-methyl thioethyl thymidine'
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                                                                                                                                                Kawasaki
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                                                                                                                                                                                                                                                                                                                                      therapy;
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Alkylation of alcohols, amines, nucleosides that are precursors beneficial as therapeutics, invo nes, or thiols, useful for preparing sors for preparation of oligomeric compounds involves use of cyclic sulfate intermediates

Example 15; Col 35; 45pp; English.

C? The present sequence is that of a chimeric oligonucleotide having some 2' carethyl thioethyl modifications. This was compared with oligonucleotides (c) with methoxyethoxy (see ABA91950) and dimethylaminopropyl (see ABA91951) (c) modifications for resistance to snake venom phosphodiseterase. The assay revealed the nuclease resistance of the modified oligomers. The invention compartives by cyclic sulfate intermediates. In particular, methods for the alkylation of alcohols, amines, thiols and their contributives by cyclic sulfate intermediates. In particular, methods for the alkylation of the 2', 3' or 5'-hydroxy position of nucleosides and contribute the modified compounds are disclosed. Displacement of the 2', 3' or 5'-O-alkyl contribute modified compounds are disclosed. Displacement of the 2', 3' or 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-modified contributes. The methods are especially useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates that are precursors for the preparation of oligomeric compounds useful as therapeutics, diagnostics and research reagents

SO

Sequence 19

BP; 0 A; 0 C; 0 G; 19

T; 0 U; 0 Other;

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The present sequence is that of a chimeric oligonucleotide having some 2' -dimethylaminopropyl modifications. This was compared with oligonucleotides with methyl thioethyl (see ABA91949) and methoxyethoxy (see ABA91950) modifications for resistance to snake venom phosphodiesterase. The assay revealed the nuclease resistance of the modified oligomers. The invention provides methods for the alkylation of alcohols, amines, thiols and their derivatives by cyclic sulfate intermediates. In particular, methods for the alkylation of the 2', 3' or 5'-0-alkyl sulfate modified compounds are sulfates to form the 2', 3' or 5'-0-alkyl sulfate modified compounds are
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                                                                                                                                                                                                                                                                                                                     Alkylation of alcohols, amines, or thiols, useful for preparing nucleosides that are precursors for preparation of oligomeric compounds beneficial as therapeutics, involves use of cyclic sulfate intermediates
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-235143/29.
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17; Conserv
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e= "2'-dimethylaminopropyl thymidine"
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"2'-dimethylaminopropyl thymidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                   Alkylation of alcohols, amines, or thiols, useful for preparing nucleosides that are precursors for preparation of oligomeric cobeneficial as therapeutics, involves use of cyclic sulfate interpretations.
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                                                                                                            AS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTTATTTATTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTTTTTTTTTTTTTTT 19
                                                                                                            Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                             PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                modified oligonucleotide.
                                                                                                                                               99US-00378665.
                                                                                                                                                                 99US-00378665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                research reagents
                                                                                                                                                                                                                                                             /mod_base=
/note= "2'.
                                                                                                                                                                                                                                                                                                           /*tag=
/mod_ba
                                                                                                                                                                                                                                                                                                                                             /*tag=
/mod_ba
                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                     note=
                                                                                                                                                                                                                         note=
                                                                                                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                                *tag=
                                                                                                                                                                                                                                                                                                 note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; 0 C; 0 G; 19 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.6%;
                                                                                                                                                                                                                                                                                                 _base=
e= "2'
                                                                                                                                                                                                                                                                                                                                                base=
                                                                                                                                                                                                                        base= OTHER
= "2'-methoxyethoxy thymidine"
                                                                                                           Z,
                                                                                                                                                                                                                                                                                                                                       "2'-methoxyethoxy thymidine"
                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                                                     Ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                            Cook
                                                                                                                                                                                                                                                                                                  -methoxyethoxy thymidine'
                                                                                                                                                                                                                                                              -methoxyethoxy
                                                                                                                                                                                                                                                                                                           OTHER
                                                                                                                                                                                                                                                                                                                                                OTHER
                                                                                                                                                                                                                                                                      OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                nuclease resistance; diagnosis; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                            PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                           Jung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.7e+03;
2;
                                                                                                            ME,
                                                                                                                                                                                                                                                              thymidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                           Kawasaki
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                                                              compounds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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The present sequence is that of a chimeric oligonucleotide having somethoxyethoxy modifications. This was compared with oligonucleotides with methyl thioethyl (see ABA91949) and dimethylaminopropyl (see

Example 15;

Col 35; 45pp; English.

intermediates

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RESULT 1752
ABK94423
ID ABK9442
XX
ARY9442
XX
AC ABK9442
XX
AC ABK9442
XX
DT 27-AUG-
DT 27-AUG-
DX Human I
XX
FR CWO-dil
KW breast
XX
CS Homo I
PN WO200
XX
PP 06-N(
XX
PP 06-N(
XX
PF 06-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABA91951) modifications for resistance to snake venom phosphodiesterase. The assay revealed the nuclease resistance of the modified Oligomers. The invention provides methods for the alkylation of alcohols, amines, thiols and their derivatives by cyclic sulfate intermediates. In particular, methods for the alkylation of the 2', 3' or 5'-hydroxy position of nucleosides and their analogues with cyclic sulfates to form the 2', 3' or 5'-0-sulfate modified compounds are disclosed. Displacement of the 2', 3' or 5'-0-sulfate with a nucleophile provides 2', 3' or 5'-0-modified nucleosides and their analogues. The methods are especially useful for the preparation of 2'-0-alkyl nucleosides and nucleoside surrogates that are precursors for the preparation of oligomeric compounds useful as therapeutics, diagnostics and research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19
                                                                                             The invention relates to detecting mutations in the BRCA1 and hMLH1 gene comprising subjecting a set of amplification products to two-dimensional DNA electrophoresis (TGDS) to produce a characteristic spot pattern for specific mutation in either the BRCA1 or the hMLH1 gene. Also included are test kits for enabling BRCA1 or hMLH1 gene testing comprising short PCR primers given in the specification, mixed in 20 mM of Tris-HC1, 50 mM of CR1, 25 micro M of dNTP, and 5 % formande. The method is useful for KC1, 25 micro M of dNTP, and 5 % formande. The method is useful for
                                                                                                                                                                                                                                                                                                                                                                                                                               Detecting mutations in the BRCA1 and hMLH1 gene comprises subjecting amplification products to 2-dimensional gel electrophoresis to produce characteristic spot pattern for a specific mutation in either the BRCA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hMLH1; DNA mismatch repair; BRCA1; ss; PCR; primer; BRCA1; breast and ovarian cancer susceptibility gene; TGDS; human; two-dimensional DNA electrophoresis; tumour suppressor gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human MLH1 DNA mismatch repair gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK94423 standard; DNA; 19
   detecting mutations in the BRCA1 (breast and ovarian cancer susceptibility gene, a tumour suppressor gene) and hMLH1 gene (a DNA mismatch repair gene). The present sequence is a PCR primer specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-471507/50
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                                                                                                                                                                                                                                                                                                                                           6; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer; ovarian cancer; tumour.
                                                                                                                                                                                                                                                                                                                                                                                                           PWTH1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAD
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                                                                                                                                                                                                                                                                                                                                                                                                        gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLIED
                                                                                                                                                                                                                                                                                                                                           21; 57pp;
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                                                                                                                                                                                                                                                                                                                                              English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  445
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exon 12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ç;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer 12.1F
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                                                                                                                                                                                                                                 for a
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RESULT 1753
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
     The present invention describes a method for detecting a nucleic acid probe, which comprises using chain extending enzymes to elongate probes. The method comprises: (a) treating the sample with a chain terminating reagent to prevent polynucleotide chain growth from the nucleic acid in the sample; (b) contacting the sample with the probe containing a terminus capable of elongation by a chain extending enzyme, where the probe hybridises to the nucleic acid in the sample; (c) contacting the sample with a chain extending enzyme and its substrates, which elongates the probe; and (d) detecting the elongated hybridised probe. Also described is a method comprising: (a) treating nucleic acid molecules or modified nucleic acids in a sample with a reagent or reagents that render the nucleic acid chains unextendable by a non-template-dependent enzyme; (b) hybridising the treated molecules with a nucleic acid probe that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hMLH1 used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tailing reaction
                                                                                                                                                                                                   Example 1; Page 5; 10pp; English.
                                                                                                                                                                                                                                                                                      WPI; 2002-361176/39
                                                                                                                                                                                                                                                                                                                                                                                   28-MAY-1999;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    telomerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tailing reaction; detection; linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-2002
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                                                                                                                                                                                                                                                         Identifying and detecting nucleic acids,
                                                                                                                                                                                                                                                                                                                                                                                                                           26-JUL-2001;
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                                                                                                                                                                                                                                                                                                                 RH
                                                                                                                                                                                                                       ring and detecting nucleic acids, particularly DNA hybridization involves employing chain extending enzymes (e.g. telomerase) to e probes to render them readily detectable.
                                                                                                                                                                                                                                                                                                                                            TULLIS R H. STREIFEL J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTATTTTTTTTAAGACA 451
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                                                                                                                                                                                                                                                                                                                 Streifel
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                                                                                                                                                                                                                                                                                                                                                                                      2000US-00580358
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "biotinylated"
19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         related exemplary primer biotin-dT18U SEQ ID NO:1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tailed primer; primer; probe; identification; amplification scheme; chain extending enzyme;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABA91970
            The present sequence is that of single nucleotide polymorphism (SNP)

C primer MPO-R. This primer was used in a multiplex endpoint SNP analysis

C as an example of the use of novel non-fluorescent asymmetric cyanide dye

c compounds of the invention as quenching reporter dyes. A 7-colour

C extension of the fluorogenic PCR 5'-nuclease, or Taqman, assay. The test

CS ystem was a set of 3 SNPs, denoted MPO, BAK and LIG. Each SNP system

CC consisted of 2 primers (see ABA91569-74) and 2 sequence-specific probes

CC consisted of 2 primers (see ABA91569-74) and 2 sequence-specific probes

CC consisted of 2 primers (see ABA91569-74) and 2 sequence-specific probes

CC consisted of 2 primers (see ABA91569-74) and 5 sequence-specific probes

CC consisted of 2 primers (see ABA91569-74) and 6 different reporter dyes (6-FAM,

CC nitrothiazole blue, at the 3' end, and 6 different reporter dyes (6-FAM,

CC nitrothiazole blue, at the 3' end, and 6 different reporter dyes (6-FAM,

CC nitrothiazole blue, at the 3' end, and 6 different reporter dyes (6-FAM,

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CC nitrothiazole blue, at the 3' end, and 6 different reporter dyes (6-FAM,

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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New non-fluorescent asymmetric cyanide dye compounds, quenching reporter dyes in nucleic acid hybridization fluorescence energy transfer as means of detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        example from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single nucleotide polymorphism; SNP; detection; Taqman; assay; quencher; hybridisation; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism PCR primer MPO-R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABA91970 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-MAY-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Col 66; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lee LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-JAN-1998;
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as normalised,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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subtracted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Haxo
spectra and as data points
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RESULT 1755
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Best Local
                                                The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleosides, nucleosides and nucleoside surrogates used for preparation of oligometric compounds having improved hybridisation affinity and nuclear resistance, which are useful as the appendice, diagnostics and nuclear resistance, which are useful as the appendice, diagnostics and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD42000 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   plots. The multiplex PCR system provides increased potential cost savings
                                                                                                                                                                                                         Alkylating 2' position of 2',3'-dihydroxy sugar molety of nucleoside for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity; nuclear resistance; alkylation; therapeutic; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide
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                                                                                                                                                                               Example 46; Col 31; 24pp; English.
                                                                                                                                                                                                                                                                                                             Kawasaki
                                                                                                                                                                                                                                                                                                                                                                   08-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                        research reagents.
                                                                                                                                                                                                                                                                                 WPI; 2002-546338/58.
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                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS
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                                                                                                                                                                                                                                                                                                             Fraser AS,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "2'-methoxyethoxy (MOE) residues"
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                        The present sequence is a modified oligonucleotide the method of the invention
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                                                                                                                                                                                                                                                                                                           Manoharan M,
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Pred. No. 1.
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Query Match
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Matches 17; Conserv

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Mismatches

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RESULT 1756
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                                            Query Match
Best Local S
Matches 17
                                                                                                            The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surgates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                              WPI; 2002-546338/58.
                                                                                                                                                                                                                                                                                                                                                                                                  08-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dihydroxy sugar moiety; 2'-0-alkyl nucleotide; hybridisation affinity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide
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                                                                                                                                                                                                                                                                                                     Alkylating 2'
                                                                                                                                                                                                                                            Example 46; Col 33; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS
                                                                                                                                                                                                                                                                              ylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used preparation of 2'-O-alkylated compounds comprises dissolving leoside in aprotic solvent, cooling, treating with base, warming,
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                                            l Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           resistance; alkylation;
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                      TTTTTATTTATTTTTT 445
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                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                            PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                  9905-00227782
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                                                                                         A; 0 C; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "5-methyl,
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                                                       . 5 %
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                                            ٥,
                                                                                         G; 19 T; 0 U; 0 Other;
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                                                       Score
Pred.
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                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2'-methoxyethyl residues"
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                                                       DB 1;
.7e+03;
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RESULT 1757 AAD42004 ID AAD4200 XX

AAD42004

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RESULT 1758
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Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JAN-1999;
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                 Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity; nuclear resistance; alkylation; therapeutic; diagnostic; ss.
                                                                         Oligonucleotide #13 used to illustrate the method of the invention.
                                                                                                                                                                                         AAD42010 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-546338/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kawasaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                 04-NOV-2002
                                                                                                                                                     AAD42010;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                           427
                                                                                                                                                                                                                                                                                                                                                                 1 Similarity
17; Conserv
                                                                                                                                                                                                                                                                                       ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            resistance; alkylation; therapeutic; diagnostic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and reacting with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AM,
                                                                                                                                                                                                                                                                                                               TTTTTATTTTATTTTTTT
                                                                                                                                                                                                                                                                                         TTTTTTTTTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PHARM INC.
                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fraser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00227782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            moiety; 2'-0-alkyl nucleotide; hybridisation affinity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #7 used to illustrate the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "5-methyl,
                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AS,
                                                                                                                                                                                                                                                                                                                                                                                     1.6%;
89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manoharan
                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                                                                             445
                                                                                                                                                                                                                                                                                                                                                                                   Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2'-dimethylaminooxyethyl residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                   .7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prakash
                                                                                                                                                                                                                                                                                                                                                                                                             19;
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                                                                                                                                                                                                                 RESULT 1759
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kawasaki AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JAN-1999;
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       Key
modified_base
                                                 Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 46; Col 35; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-546338/58.
                                                                                   Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
                                                                                                              Oligonucleotide #23 used to illustrate the method of the invention
                                                                                                                                        04-NOV-2002
                                                                                                                                                                AAD42020
                                                                                                                                                                                        AAD42020 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS
                                                                         nuclear resistance;
                                                                                                                                                                                                                                                                    427 TTTTTATTTTATTTTTT 445
                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                      TTTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fraser AS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHARM INC
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18. .19
15. .18
/*tag=
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/mod_base= OTHER
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           Location/Qualifiers
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note=
                                                                                                                                                                                                                                                                                                                 1.6%;
                                                                                                                                                                                          DNA;
                                                                          alkylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "2'-dimethylaminooxyethyl thymidine (T-2'DMAOE)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Phosphorothioate backbone"
                                                                                                                                                                                          19
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                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                  Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                        Mismatches
                                                                         therapeutic;
                                                                                                                                                                                                                                                                                                                    1.7e+03
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                                                                                                                                                                                                                                                                                                                                DB 1;
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                                                                      diagnostic;
                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                         Indels
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RESULT 1760
AAD42001
ID AAD4200
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Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.
                                                                                                                                                                                                Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity; nuclear resistance; alkylation; therapeutic; diagnostic; ss.
                                                                                                                                                                                                                                         Oligonucleotide #4 used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 46; Col 41; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-546338/58.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JAN-1999;
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                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                   04-NOV-2002
                                                                                                                                                                                                                                                                                               AAD42001;
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                                     11-JUN-2002.
                                                              US6403779-B1
                                                                                                                               modified_base
                                                                                                                                                                                                                                                                                                                         AAD42001 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                   427
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                            TTTTTTTTTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                Location/Qualifiers 16. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "2'-O-methyleneiminooxyethyl thymidine"
                                                                                     /mod_base= OTHER
/note= "5-methyl, 2'-dimethylaminooxyethyl residues"
                                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.6%;
                                                                                                                                                                                                                                                                                                                           19
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                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8; DB 1;
Pred. No: 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                                                                                                                                                                                                     445
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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08-JAN-1999;

99US-00227782

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RESULT 1761
AAD4201
ID AAD4201
XX AAD4201
XX OALD4201
XX OLIGONU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity; nuclear resistance; alkylation; therapeutic; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-NOV-2002
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  Alkylating 2'
                                                  WPI; 2002-546338/58
                                                                                                                                                                                              08-JAN-1999;
                                                                                                   Kawasaki
                                                                                                                                                                                                                                              08-JAN-1999;
                                                                                                                                                                                                                                                                                               11-JUN-2002
                                                                                                                                                   (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
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17; Conserv
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                                                                                                AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTTTTTTTTTTTTTT
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                                                                                                                                                   PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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     position of
                                                                                                   Fraser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #14 used to illustrate the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                             note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.6%;
                                                                                                   AS,
                                                                                                                                                                                                                                                                                                                                                                                                                      base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                             "2'-dimethylaminooxyethyl thymidine (T-2'DMAOE)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Manoharan M,
       2',3'-dihydroxy sugar moiety of nucleoside used
                                                                                                   Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                   Σ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; "-
1.7e+03;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cook PD,
                                                                                                     Cook
                                                                                                   PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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                                                                                                        Prakash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          used
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for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester. 
 \{ \{ \} \}
Example 46; Col
37; 24pp; English.
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The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention

Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

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Matches
                    Query Match
Best Local
427
             1 Similarity
17; Conserv
              Conservative
                    1.6%;
           0;
                     Score 15.8;
Pred. No. 1.
              Mismatches
                    .7e+03;
                             BB
                           Length
              Indels
                             19;
              0
              Gaps
               0,
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片 8 RESULT 1762 AAD42005 1 TTTTTATTTTATTTTTTT 445 TTTTTTTTTTTTTTTTT

04-NOV-2002 AAD42005; AAD42005 standard; (first DNA; entry) 19

Oligonucleotide #8 used to illustrate the method of the invention

nuclear Dihydroxy resistance; sugar moiety; 2'-0-alkyl nucleotide; hybridisation affinity; ssistance; alkylation; therapeutic; diagnostic; ss.

Unidentified

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modified_base
11-JUN-2002.
                            US6403779-B1.
                                                                                                      Location/Qualifiers
                                                         /mod_base= OTHER
/note= "5-methyl,
                                                         2'-methoxyethyl residues"
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08-JAN-1999; 9905-00227782

08-JAN-1999; 99US-00227782

(ISIS-) ISIS PHARM INC.

Kawasaki AM, Fraser AS, Manoharan Z, Cook g, Prakash Į,

WPI; 2002-546338/58.

Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.

Example 46; C01 33; 24pp; English.

The the present invention relates to a novel method of selective alkylation the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. method involves dissolving the nucleoside in at least one aprotic

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AAD42003
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                         The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improve physicistation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19
                                                                                                                                                                                                                                 Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dihydroxy sugar moiety; 2'-O-alk nuclear resistance; alkylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide #6 used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD42003 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-NOV-2002
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                                                                                                                                                                                                                                                                                               WPI; 2002-546338/58
                                                                                                                                                                                                                                                                                                                          Kawasaki AM,
                                                                                                                                                                                                                                                                                                                                                                                  08-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                          Example 46; Col 33; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     al Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                       reacting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                       PHARM INC.
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                                                                                                                                                                                                                                                                                                                          Fraser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note= "5-methyl,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.6%;
                                                                                                                                                                                                                                                                                                                          AS,
                                                                                                                                                                                                                        with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ςυ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2'-O-alkyl nucleotide; hybridisation affinity;
                                                                                                                                                                                                                        ester.
                                                                                                                                                                                                                                                                                                                          Manoharan
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2'-0-propyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.8; DB 1;
No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                          Z,
                                                                                                                                                                                                                                                                                                                          Cook
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnostic;
                                                                                                                                                                                                                                                                                                                        PD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
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Sequence 19

BP;

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19

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RESULT 1764
AAD41998
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Best Local S
Matches 17
                                                                   Best Loc
Matches
                                                                                                       Query Match
                                                                                                                                                                      The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics; diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                            Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; nuclear resistance; alkylation; therapeutic; d:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD41998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAD41998 standard; DNA; 19 BP
                                                                                                                                        Sequence 19
                                                                                                                                                                                                                                                                                                                                                                             Example 46; Col 31; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-546338/58.
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                                                                                                                                                                                                                                                                                                                                                                                                               cooling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kawasaki
                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   427
                                 427
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17; Conser
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                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                 and reacting with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AM,
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                               TTTTATTTTTTTTTT
                                                                                                                                          B₽;
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                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fraser AS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00227782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9908-00227782
                                                                                                                                          0 A; 0 C; 0 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #1 used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
/mod_ba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "5-methyl,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.6%;
                                                                                    1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                 ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Manoharan
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Pred. No. 1.7e+03;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
19
                                 445
                                                                                      Score 15.8;
Pred. No. 1
                                                                                                                                            19
                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2'-aminooxyethoxy (2'-AOE) residues"
                                                                                                                                            T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sook
                                                                                        .7e+03;
                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnostic;
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                                                                                                       Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prakash
                                                                       Indels
                                                                                                          19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
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                                                                     Gaps
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RESULT 1766
AAD42009
ID AAD4200
XX
AC AAD4200
XX
AC AAD4200
XX
OT 04-NOV-
                                                                                                                                                                                                          RESULT 1765
AAD41999
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                                                                                                                                Ś
                                                                                                                                                                  Query Match
Best Local S
                                                                                                                                                          Matches
                                                                                                                                                                                                                             The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester. The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                        Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-O-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kawasaki AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6403779-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dihydroxy sugar moiety; 2'-0-alkyl nucleotide; hybridisation affinity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD41999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD41999
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-546338/58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUN-2002
  04-NOV-2002
                                                                                                                                                                                                         Sequence 19 BP; 0
                                                                                                                                                                                                                                                                                                                                                                    Example 46;
                          AAD42009;
                                                 AAD42009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS
                                                                                                                                   427
                                                                                                                                                          l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                 standard;
                                                                                                                                                                                                                                                                                                                                                                    Col 31; 24pp; English.
                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fraser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-00227782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00227782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #2 used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "5-methyl,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= a
                                                                                                                                                                                                         A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alkylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                     1.6%;
89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                  BP.
                                                                                                                                                          0
                                                                                                                                                                     Score 15.8;
Pred. No. 1.
                                                                                                            19
                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           therapeutic; diagnostic;
                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2'-dimethylaminooxyethoxy (2'-DMAOE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3
                                                                                                                                                       1.7e+03;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ,
(00)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PD,
                                                                                                                                                                               Length
                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Prakash
                                                                                                                                                                                   19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TP.
                                                                                                                                                           0
                                                                                                                                                           Gaps
                                                                                                                                                           0
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Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation nuclear resistance; alkylation; therapeutic; diagnostic; ss.
WPI; 2002-546338/58.
                             Kawasaki AM,
                                                             (ISIS-) ISIS
                                                                                              08-JAN-1999;
                                                                                                                            08-JAN-1999;
                                                                                                                                                                                            US6403779-B1
                                                                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide #12 used to illustrate the
                                                                                                                                                            11-JUN-2002.
                                                               PHARM INC.
                             Fraser AS,
                                                                                              99US-00227782
                                                                                                                              99US-00227782.
                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                 'mod_base= OTHER
'note= "2'-dimethylaminooxyethyl thymidine (T-2'DMAOE)"
                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                             Ø
                                 Manoharan
                                 Z,
                                 Cook
                                                                                                                                                                                                                                                                                                                                                                                                         method of
                                 BD,
                                  Prakash
                                                                                                                                                                                                                                                                                                                                                                                                         the invention.
                                  TP.
                                                                                                                                                                                                                                                                                                                                                                           affinity;
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Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used for preparation of 2'-0-alkylated compounds comprises dissolving nucleoside in aprotic solvent, cooling, treating with base, warming, cooling and reacting with ester.

Example 46; Col 35; 24pp; English.

The present invention relates to a novel method of selective alkylation of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside. The method involves dissolving the nucleoside in at least one aprotic solvent, cooling, treating with base, warming, cooling and reacting with a reactive ester: The method is useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside surrogates used for preparation of oligomeric compounds having improved hybridisation affinity and nuclear resistance, which are useful as therapeutics, diagnostics and research reagents. The present sequence is a modified oligonucleotide used to illustrate the method of the invention

Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

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Query Match
Best Local S
  Matches
  17;
         Similarity
  Conservative
        1.6%;
  0
         Score 15.8; DB 1;
Pred. No. 1.7e+03;
   Mismatches
1.7e+03;
2;
                Length 19;
   Indels
   0
   Gaps
   0
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밁
               Ś
                427
<u>بــ</u>
TTTTTTTTTTTTTTTTT
        TTTTATTTTATTTTTTT 445
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RESULT 1767
ACF62693
                         Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma; cytochrome p450; subfamily IIIA; nifedipine oxidase; polypept cytostatic; PCR primer; ss.
                                                              Cancer based on CYP3A5 related
                                                                                 08-OCT-2003
                                                                                                  ACF62693;
                                                                                                                    ACF62693
                                                                                                                    standard;
                                                                                 (first
                                                                                                                     DNA;
                                                                                 entry)
                                                                                                                      19
                                                                                                                      ΒP
                                                               oligonucleotide
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SEQ

ID NO:522

polypeptide

5

Synthetic

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ACF62692,
ID ACF6
XX
AC ACF6
AC ACF6
AC Canc
DE Canc
XX
CANC
CYC
XX
CY
XX
C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         derivative for the preparation of a pharmaceutical composition for cancer, or malignant glioma in a subject having a genome with a variant callele which comprises a cytochrome p450, subfamily IIIA (nifedipine cytostatic activity. The therapeutic applications of (I) is improved, since it is possible to individually treat a subject with an appropriate dosage and/or an appropriate derivative of (I). Therefore, undesirable, harmful or toxic effects are efficiently avoided. Unnecessary and cytostatically harmful treatment of those subjects who do not respond to the treatment with substances (nonresponders), as well as the development of the CACF67751 and ABM34912 to ABM35013 represent sequences used in the cycentrical control of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New use of irinotecan for preparation of compositions for treating cancer in subject having genome with variant allele comprising cytochrome p450, subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-JUL-2001; 2001EP-00117608.
24-MAY-2002; 2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                             Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma; cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide cytostatic; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 1 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 46; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JUL-2002; 2002WO-EP008219
                                  23-JUL-2001;
24-MAY-2002;
                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cancer based on CYP3A5 related oligonucleotide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-OCT-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes the use of irinotecan (I) or its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-268144/26.
                                                                                                                        23-JUL-2002; 2002WO-EP008219.
                                                                                                                                                                                                                                              WO2003013534-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACF62692 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EPID-) EPIDAUROS BIOTECHNOLOGIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832 CTTGTGATCTGCCTGCCTC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     credicarcrececere 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                  2001EP-00117608.
2002EP-00011710.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NO:521.
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RESULT 1769
ADB2136
XX ADB2136
XX ADB2136
XX ADB2136
XX Irinote
XX Urident
XX Urident
XX Urident
XX Urident
XX Urident
XX Irinote
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes the use of irinotecan (I) or its compositive for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant callele which comprises a cytochrome p450, subfamily IIIA (nifedipine coxidase), polypeptide 5 (CYP3A5) polypuclectide (II). (I) and (II) have cytostatic activity. The therapeutic applications of (I) is improved, comparated to individually treat a subject with an appropriate comparated exivative of (I). Therefore, undesirable, compared to the comparated exivative of (I). Therefore, undesirable, compared to the comparated exivative of (I) are fore, undesirable, compared to the compared to the comparated exivative of (I) are fore to the comparated exivative of (I) are fore to the comparated exivative of (I) are fore to a subject who do not respond to the comparated to subspace (I) as the development of comparated with substances (nonresponders), as well as the development of comparated to subspace the comparated of the substances due to subspace and comparated of the comparated of the present invention of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       irinotecan; colorectal cancer; cervical cancer;
lung cancer; ovarian cancer; pancreatic cancer;
variant allele; multidrug resistance protein 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 5 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New use of irinotecan for preparation of compositions for treating in subject having genome with variant allele comprising cytochrome subfamily IIIA, polypeptide 5 polynuclectide, termed CYP3A5.
                                                                                                                                                                                                                                                                                23-JUL-2001; 2001EP-00117608.
24-MAY-2002; 2002EP-00011710.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MRP1 based cancer related nucleic acid SEQ ID NO:522.
                                                                                             WPI; 2003-354397/33.
                                                                                                                                                                                                                                                                                                                                                                             23-JUL-2002; 2002WO-EP008200
                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003013533-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB21364 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPID-) EPIDAUROS BIOTECHNOLOGIE
                                                                                                                                                                                                                      (EPID-) EPIDAUROS BIOTECHNOLOGIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCGTGATCTGCCCGCCTC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastric cancer;
malignant glioma;
MRP1; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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Use of irinotecan or its derivative for preparation of a pharmaceutical composition for treating cancer in a subject having a genome with a

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RESULT 1770
ADB21363/c
ID ADB21363/c
XX ADB2136
AC ADB2136
XX ININOTE
KW IUNG CA
KW IUNG CA
KW Variant
XX VA
CS Unident
XX UNICANT
CS UNICANT
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for the use of irinotecan (I) cits derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance protein 1 (MRP1) polynucleotide (II). (I) has cytostatic activity. (I) or its derivative can be used for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject, where the subject is a human (preferably African or Asian) or a mouse. The present sequence represent a sequence which is used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      variant allele comprising polynucleotide.
cancer, or war-s-allele which comprises
                                                                                                                                                                                                                                                       Use of irinotecan or its derivative for composition for treating cancer in a substant allele comprising a multidrug polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 1 A;
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     The present invention describes a method for the use of irinotecan (I) or its derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance protein 1 (MRP1) polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JUL-2001;
24-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MRP1 based
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                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-354397/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Heinrich G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-JUL-2002; 2002WO-EP008200
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                                                                                                                                                                                                         Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPID-) EPIDAUROS
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nes 17; Conserv
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                                                                                                                                                                                                      Page 55; 100pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001EP-00117608.
2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
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                                                                                                                                                                                                         English
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Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                     e for preparation of a pharmaceutical a subject having a genome with a rug resistance protein 1
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RESULT 1771
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             can be used for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject, where the subject is a human (preferably African or Asian) or a mouse. The present sequence represents a sequence which is used in the exemplification of the present invention.
                                            Increasing binding of oligomeric compound to proteins useful preparation of antisense therapeutics, involves use of modificaligomeric compound having oligonucleotide group.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide;
DNA-RNA hybrid; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide with 2'-0-(2-(methylthio)ethyl)-5-methyluridine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ58336 standard; DNA; 19
                                                                                                                                              03-JUL-2001;
28-JAN-2002;
                                                                                                                                                                           01-JUL-2002; 2002WO-US020940
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                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
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                                                                                                         Prakash
                                                                                                                           (ISIS-) ISIS
                                                                                                                                                                                                16-JAN-2003
                                                                                                                                                                                                                   WO2003004603-A2
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                                                                                                         ΤP,
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                            27;
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                                                                                                        Manoharan
                                                                                                                            PHARM INC
                                                                                                                                              2001US-0302683P
2002US-00058740
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17
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19
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                                                                                                                                                                                                                                                                                                                                                                    mod.
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                                                                                                                                                                                                                                                                                       mod_base=
                                                                                                                                                                                                                                                                                                                    'note=
                            72;
                                                                                                                                                                                                                                        notes
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.e= "2'
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                          122pp;
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                                                                                                                                                                                                                                                                                                                                                                     base=
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                                                                                                                                                                                                                                                                                                                    "2'-0-(2-methylthio)ethyl)-5-methyluridine"
                                                                                                                                                                                                                                                                                                                                                          18e= OTHER
12'-0-(2-methylthio)ethyl)-5-methyluridine"
                                                                                                                                                                                                                                                           Q,
                                                                                                                                                                                                                                       -O-(2-methylthio)ethyl)-5-methyluridine
                                                                                                                                                                                                                                                                              -O-(2-methylthio)ethyl)-5-methyluridine"
                                                                                                                                                                                                                                                 OTHER
                                                                                                                                                                                                                                                                                        OTHER
                                                                                                                                                                                                                                                                                                                                OTHER
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Pred. No. 1.7e
0; Mismatches
                            English.
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The present sequence is an example of an oligonucleotide of the invention containing 2'-O-(2-(methylthio)ethyl)-5-methyluridine (2'-O-(MTE)-5-

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Best Local S
              19-SEP-2001;
20-SEP-2001;
20-SEP-2001;
25-SEP-2001;
25-SEP-2001;
26-SEP-2001;
14-DEC-2001;
26-PEB-2002;
03-MAY-2002;
17-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; NOVX; antiatherosclerotic; hypotensive; cardiant; dermatological; anorectic; immunosuppressive; cytostatic; antiidiabetic; antiinfertility; haemostatic; antiinflammatory; antiasthmatic; antiidiabetic; antiinfertility; haemostatic; antiinflammatory; antiasthmatic; anti-HIV; immunomodulator; neuroprotective; nootropic; antiparkinsonian; metabolic; antilipaemic; gene therapy; cardiomyopathy; atherosclerosis; hypertension; scleroderma; congenital heart defect; aortic stenosis; valve disease; transplantation; tuberous sclerosis; obesity; congenital adrenal hyperplasia; diabetes; prostate cancer; metabolic disorder; neoplasm; lymphoma; uterus cancer; fertility; haemophilia; hypercoagulation; graft versus host disease; fidiopathic thrombocytopenic purpura; horonchial asthma; anorexia; crohn's disease; multiple sclerosis; infectious disease; cancer; cancer-associated cachexia; Alzheimer's disease; Parkinson's disease; metabolic; disorder; dyslipidaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            methyluridine) modifications. In examples of the invention, 2'-O-MTE was incorporated into oligonucleotides and evaluated for antisense properties in comparison with the known 2'-O-(2-methoxyethyl) (2'-O-MOE) modification. The 2'-O-MTE modified oligonucleotides exhibited similar binding affinity to target RNA as their 2'-O-MOE equivalent while binding to human serum albumin was improved. The modification can be used to modulate the pharmacokinetics of oligonucleotides, e.g. in antisense
                                                                                                                                                                                       17-SEP-2001;
17-SEP-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human NOV9 reverse PCR primer SEQ ID NO:244.
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                                                                                                                                                                                                                                                                                                                                                                                    WO2003023001-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   metabolic syndrome
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                                         2001US-0322781P
2001US-032281FP
2001US-032281FP
2001US-032351FP
2001US-032363FP
2001US-0324969P
2001US-0324969P
2001US-0324969P
2001US-03411499P
2001US-0341149PP
2001US-0341149PP
2001US-0341149PP
2001US-0341149PP
2001US-0341149PP
2001US-0341149PP
2001US-0361663P
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2001US-0318184P.
2001US-0318430P.
2001US-0322636P.
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                                                                                                                                                                                                                                                                                                                     2002WO-US028538.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Mismatches
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Pred.
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No. 1.
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RESULT 1773
ADB88452/C
ID ADB8845
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AC ADB8845
XZ
DT 04-DECXX
DE Human U
XX
KW ss; iri
KW colorec

(first

ADB88452 standard;

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ss; irinotecan; cancer; UGTIA1; cytostatic; topoisomerase I inhibitor; colorectal cancer; cervical cancer; gastric cancer; lung cancer;

Human UGT1A1 variant allele sequence fragment SEQ ID NO:521

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                                                                                                                                                                                                                                              CC hypotensive, dermatological anorectic, immunosuppressive, cytostatic, contidiabetic, antiinfertility, haemostatic, antiinfammatory, anti-HTV, cc antiasthmatic, metabolic, immunomodulator, neuroprotective, notropic, antiparkinsonian and antilipaemic activities, and can be used in gene ct therapy. NoVX proteins are useful for treating or preventing a pathology consisted with the human disease. NoVX nucleic acide, proteins and can be used in the treatment and diagnosis of cardiomyopathy, catherosciated with the human disease. NoVX nucleic acide, proteins and can be used in the treatment and diagnosis of cardiomyopathy, catherosciated with the human disease. NoVX nucleic acide, proteins and consisted exists the protein and diagnosis of cardiomyopathy, catherosciated with the human disease. NoVX nucleic acide, proteins and consists, hypertension, congenital heart defects, acrtic stenosis, congenital hypertensis, scleroderma, obesity, transplantation, congenital adrenal hyperplasia, prostate cancer, diabetes, metabolic congenital adrenal hyperplasia, prostate cancer, fertility, haemophilia, hypercoagulation, idiopathic thrombocytopenic purpura, graft versus host confectious disease, anorexia, cancer-associated eachexia, cancer, confectious disease, parkinson's disease, immune disorders, cancer, consective, disease, parkinson's disease, immune disorders, cancer, consective, disease, anorexia, cancer associated eachexia, cancer, consective, which are used in examples from the present invention with any consecuted in examples from the present invention with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Agee ML, Alsobrook JP, Anus...

Agee ML, Alsobrook JP, Anus...

Burgess CE, Casman SJ, Catterton E, Eisen Crabtree J, Dipippo VA, Edinger SR, Eisen I Gangolli EA, Gerlach VL, Giot L, Gorman J Kekuda R, Khramtsov NV, Leach MD, Lepley Kekuda R, Khramtsov NV, Coi CE, Ort T, Walvankar UM, Miller CE, Ooi CE, Ort T, Rieger DK, Rothenberg ME, She Rieger DK, Rothenberg ME, She Taupier RJ, Tw
                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUL-2002; 2002US-0393332P.
17-JUL-2002; 2002US-0396412P.
13-AUG-2002; 2002US-0403517P.
06-SEP-2002; 2002US-00236417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes isolated human NOVX proteins, where 1 to 42. ACC62236 to ACC62345 encode the human NOVX proteins given i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel human proteins and nucleic acid encoding the proteins, diagnosis, treatment and prevention of disorders involving the protein or nucleic acid e.g. cardiac and neurological disorded protein or nucleic acid e.g. cardiac
                                                                                                                                                                  Sequence 19
                                                                                                                                                                                                                              Bequences, which are used in examples in BRS4277 represents a human trypsinogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 to 42. ACC62236 to Accessa encour our manner representation ABR54167 to ABR54276. NOVX sequences have antiatherosclerotic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example C; Page 308; 460pp; English.
                                                                                                                                                                                                               the human
19
                                     AGTGCAGTGGCGCAATCTT
                                                                                                                                                                                               NOV35b protein in the exemplification of the present invention
                                                                                                                                                                    BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                Conservative
                                                                                                    1.6%;
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                                                                                                    Score
Pred.
                                        671
                                                                                    Mismatches
                                                                                                    15.8; DB 1
No. 1.7e+03
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Twomlow N,
                                                                                                                        Length 19;
                                                                                    Indels
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Vernet CAM,
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                                                                                Gaps
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THE PRODUCT OF THE PR
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ADB88453
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Best Local
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uridine
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24-MAY-2002; 2002EP-00011710
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                                                                                                                                                                                                                                                       ss; irinotecan; cancer; UGTIA1; cytostatic; topoisomerase I inhibitor; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; uridine diphosphate glycosyltransferasel member A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 5 A; 4 C; 9 G; 1 T; 0 U;
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                        23-JUL-2002; 2002WO-EP008217.
                                                                                         20-FEB-2003.
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Pred. No. 1.
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RESULT 1775
ADB97435/c
ID ADB9743
XX ADB9743
XX ADB9743
XX Irinote
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Best Local (
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24-MAY-2002; 2002EP-00011710
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  New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003013537-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nultidrug
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24-MAY-2002;
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17; Conserv
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2002EP-00011710
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Pred. No. 1
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multidrug

resistance 1 polynucleotide

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RESULT 1776
ADB97436
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Best Local S
Matches 17
The invention relates to the novel use of irinotecan or its derivative for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele whice comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The invention is useful for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
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colorectal, cervical
                                                                                                                                             Claim
                                                                                                                                                                       New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.
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multidrug res
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24-MAY-2002; 2002EP-00011710.
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lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human MDR1 variant allele sequence fragment SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB97436 standard;
                                                                                                                                                                                                                                                                                                      (EPID-) EPIDAUROS BIOTECHNOLOGIE
                                                                                                                                                                                                                                                                                                                                                                                 23-JUL-2002; 2002WO-EP008218
                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention relates to the novel use of irinotecan or its derivative the preparation of pharmaceutical compositions for treating
                                                                                                                                                                                                                                          2003-268145/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                           84; 130pp;
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                                                                                                                                             English.
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Pred. No. 1
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                                                                                                                                                                                         pharmaceutical compositions for with variant allele comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ID NO:522.
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RESULT 1777
ADB92627
ID ADB9262
XX ADB9262
XX DAB9262
XX ITING O4-DEC-
XX ITING C6-
XX ITING C6-
XX ITING C7-
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Best Local S
Matches 17
                                                                                          Query Match
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Matches 17
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lung cancer; ovarian cancer; pancreatic cancer; malic
multidrug resistance 1; MDR1; cytostatic; ds; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     glioma in a subject (preferably human, more preferably African or Asian) or a mouse. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                    the preparation of a pharmaceutical composition for treating colorect cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which compus a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The present sequence is used in the invention has cytostatic activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.
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24-MAY-2002;
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                                                                                                                                                                                                                                   exemplification of
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                                                                                                                                                                                                                                                                                                                                                                                                                          8; Page
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<u>, .</u>
                                                                                                                  Similarity
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                                            CTTGTGATCTGCCTGCCTC
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2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                                                                                             55; 104pp; English
                                                                                                                                                                                                                                     the invention.
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                                                                                                                1.6%;
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                                                                                                                  Score 15.
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                                                                                                                                      15.8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pharmaceutical compositions with variant allele comprisi
                                                                                                                     .7e+03
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                                                                                                                                           DB 1;
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                                                                                                                                           Length
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UGT1A1; MRP1;
                                                                                                                                                                                                                                                                                                                                                                              derivative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                                                                                                                                                                                                                                                                                                        colorectal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comprising
                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                            comprises
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RESULT 1778 ADB92626/c

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RESULT 1779
ADE14131/c
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Best Local
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                                                                                                                                                                                                                                                                        The invention relates ro a novel use of irinotecan or its derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprise a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The present sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; ds; human; UGTIA1; MRP1; TOP1.
                                                                                                                                                                                                                                                                                                                                                      New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising multidrug resistance 1 polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                           23-JUL-2001;
24-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human MDR1 variant allele sequence fragment
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                                                                                                                                                                                                                                                                                                                                     Claim 8;
                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-342400/32.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                   exemplification
                                                glaucoma
                                                                                  Optineurin
                                                                                                                                    ADE14131 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                          (EPID-) EPIDAUROS BIOTECHNOLOGIE
09-OCT-2003
                               Homo sapiens
                                                                 Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
                                                                                                  29-JAN-2004
                                                        glaucoma;
                                                                                                                                                                                              832 CTTGTGATCTGCCTGCCTC 850
                                                                                                                                                                              19
                                                                                                                                                                                                                l Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; DNA;
                                                related disorder; motif;
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                                                                                                                                                                               CTCGTGATCTGCCCGCCTC 1
                                                                                 promoter motif, repeat element or regulatory region #240.
                                                                                                                                                                                                                                                 BP; 5
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          Kerb
                                                                                                                                                                                                                                                                                                                                                                                                                                           2001EP-00117608
2002EP-00011710
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                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                     55; 104pp; English.
                                                                                                                                                                                                                                                                   of the invention.
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Pred. No. 1.7e+03
0; Mismatches
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                                                 repeat
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                                                 element;
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                                                                                                                                                                                                                                Length 19;
                                                 regulatory region
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ADE99245
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                                                                                                                                                                                                Query Match
Best Local S
Matches 17
                                                                                                                     ADE99245 standard; DNA; 19 BP.
         US6600032-B1
                           Synthetic
                                           nuclease
                                                   Oligomeric
                                                                  Modified oligomeric
                                                                                                     ADE99245
                                                                                   12-FEB-2004
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CCACCTGCCTCGGCCTTCC 1 CCACCTGCCTCAGCCTCCC 388

resistance; hepatotropic; virucide;

compound; hepatitis C virus; 2'-0-modification;

antiinflammatory;

88

compound #5. entry)

(first

Similarity

1.6%;

Score 15.8; Pred. No. 1

1.7e+03;

Conservative

0

Mismatches

2

Indels

0

Gaps

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The invention relates to an isolated nucleic acid (NI) comprising at CC least 20 but not more than 1500 consecutive nucleotides of the optineurin CC promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter promoter, a host cell comprising the promoter operably linked to a compression of the optineurin grounds are cell or bodily fluid (comprising detecting a polymorphism complements), detecting a SNP sequence variation in a sample containing DNA, detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation compression of glaucoma or to a progressive ocular hypertensive consecutivitility to glaucoma or to a progressive ocular hypertensive consecutivity of progression of visual field in a patient (or the severity or progression of glaucoma in a patient, comprising providing amplification reaction primers that direct amplification of a selected containing the variation within the optineurin comprising providing a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid sequences of the optineurin gene are useful to polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and prognose 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-MAR-2002; 2002US-00091281
                                                                                                                                                                                                                                                                                                                   detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-864168/80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SIEE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAR-2002; 2002US-00091281
                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                           putative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 11; SEQ ID NO 242; 159pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MORI/)
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) RAYMOND V.
) MORISSETTE
                                                                                                                                                                                                                                                                  regulatory region.
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                                                                                                                                    3 C; 11
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                                                                                                                                    G; 1
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                                                                                                                                    T; 0 U;
DB 1;
                                                                                                                                    0 Other;
Length 19;
                                                                                                                                                                                                                                                                                                                                                      repeat element or
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ADE99265
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to oligomeric compounds having at least one nucleoside. The compounds are useful for therapeutic and investigative purposes and for treating hepatitis C virus infection. The compounds having 2'-O-modifications increases their affinity and nuclease resistance. This sequence represents an oligomeric compound of the
                                                                                                                                                                                                                                                                  Oligomeric
                            Disclosure;
                                                        New oligomeric compound having at least one nucleoside useful for therapeutic and investigative purposes e.g. for treating hepatitis
                                                                                                                                                                                                                                                                                      Modified oligomeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oligomeric compound having at least one nucleoside useful therapeutic and investigative purposes e.g. for treating hepar virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-AUG-1999;
                                                                                                              Manoharan
                                                                                                                                                    07-AUG-1998;
                                                                                                                                                                         06-AUG-1999;
                                                                                                                                                                                             29-JUL-2003
                                                                                                                                                                                                                  US6600032-B1
                                                                                                                                                                                                                                                          nuclease
                                                                                                                                                                                                                                                                                                          12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                   ADE99265 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-AUG-1998;
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                                                                                                                                 (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS
                                                                                         2003-895259/82
                                                                                                                                                                                                                                                                                                                                                                                                                         427
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                                                                                                                                                                                                                                                                                                                                                                                                                                            17,
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                                                                                                                                 ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                        resistance; hepatotropic; virucide; antiinflammatory; ss.
                                                                                                                                                                                                                                                                                                                                                                                                     TTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTTATTTTATTTTTTT 445
                                                                                                             Σ,
                                                                                                                                                                                                                                                                  compound;
                           SEQ ID NO 26; 26pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                 PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PHARM INC
                                                                                                             Cook PD;
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                                                                                                                                                     98US-00130566
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                                                                                                                                                                                                                                                                                                                                                   DNA; 19
                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                       compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6%;
89.5%;
                                                                                                                                                                                                                                                                  hepatitis C virus; 2'-O-modification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26pp; English.
                                                                                                                                                                                                                                                                                                                                                   BP.
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Pred. No. 1.7e+03;
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                            English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
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nucleoside. The invention

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relates to oligomeric compounds having ne compounds are useful for therapeutic

at least

investigative

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RESULT 1782
ADH97218
ID ADH9721
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Best Local S
Matches 17
                                         Query Match 1.6
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                          This invention relates to novel synthetically modified oligomers that have increased nuclease resistance and have enhanced hybrid binding. So oligomers are useful for diagnostic and therapeutic uses such as antisense technologies. The invention also discloses a method for the preparation of the oligomers with modifications as fully defined in the specification. The present sequence represents a synthetically modification oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           purposes and for treating having 2'-O-modifications resistance. This sequence invention.
                                                                                      Sequence 19
                                                                                                                                                                                                                                   Guanidinium
therapeutic
                                                                                                                                                                                                                                                                                           Manoharan
                                                                                                                                                                                                                                                                                                                                      07-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                           07-JUL-2000; 2000US-00612531
                                                                                                                                                                                                                                                                                                                                                                                                       US6534639-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19
                                                                                                                                                                                                  Example 26; SEQ ID NO 7; S1pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  18-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nuclease resistance; hybrid binding; antisense technology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH97218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH97218 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              nodified_base
                    427
                                                                                                                                                                                                                                                                      2003-644179/61.
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                                                                                                                                                                                                                                                                                                                 SISI
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             TTTTTATTTTATTTTTTT
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                                                                                                                                                                                                                                                                                         Σ,
                                                                                                                                                                                                                                  functionalized oligonucleotides used for diagnostic, or investigative purposes comprises a number of nucleotide
                                                                                      BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 0 A; 0 C; 0 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified nuclease resistant oligomer
                                                                                                                                                                                                                                                                                         Cook PD,
                                                                                                                                                                                                                                                                                                                                       99US-00349040
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod
                                                                                                                                                                                                                                                                                                                                                                                                                             'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                 INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                      present sequence represents a synthetically modified
                                                    89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                      base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                             "OTHER =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                           Prakash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hepatitis C virus infection. The compounds increases their affinity and nuclease represents an oligomeric compound of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                     Score 15.8;
Pred. No. 1.
                      445
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                            Mismatches
                                                                                                                                                                                                                                                                                           ΤP,
                                                                                                                                                                                                                                                                                                                                                                                                                             2'-0-[2-(guanidinium)ethyl]"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                           Mohan
                                                     1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                 DB 1;
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                                                              Length
                                            Indels
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RESULT 1784
ADH97224
ID ADH9722
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AC ADH9722
XC ADH9722
XX
DT 15-APR-
XX
DE Synthet
XX
KW Nucleas
XX
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                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                This invention relates to novel synthetically modified oligomers that have increased nuclease resistance and have enhanced hybrid binding. Sucoligomers are useful for diagnostic and therapeutic uses such as antisense technologies. The invention also discloses a method for the preparation of the oligomers with modifications as fully defined in the specification. The present sequence represents a synthetically modified oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nuclease resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetically modified nuclease resistant oligomer
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                                                                                                                                                                                                                                                                                                                                                                                           Guanidinium functionalized oligonucleotides used for diagnostic, therapeutic or investigative purposes comprises a number of nucl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                           Example
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-644179/61.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified_base
             Nuclease
                                  Synthetically modified nuclease resistant oligomer #13.
                                                                              ADH97224;
                                                                                                   ADH97224 standard;
                                                                                                                                                                                                                                              Sequence
                                                        15-APR-2004
                                                                                                                                                                             427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS
                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                          26; SEQ ID NO 3; 51pp; English.
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                                                                                                                                                                                                                                              19 BP; 0 A;
                                                                                                                                                                                                     Conservative
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                                                        (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                   DNA;
                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hybrid binding;
                                                                                                                                                                                                              89.5%;
                                                                                                                                                                                                                                              0 C; 0 G; 19 T; 0
             hybrid binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "OTHER = 2'-0-[2-(guanidinium)ethyl]"
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                                                                                                    BP
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                                                                                                                                                                               445
                                                                                                                                                         19
                                                                                                                                                                                                              Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                           purposes comprises a number of nucleotide
                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense technology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mohan
               antisense technology;
                                                                                                                                                                                                                                                Ų;
                                                                                                                                                                                                              .7e+03;
                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                0 Other;
                                                                                                                                                                                                                        Length 19;
                                                                                                                                                                                                     Indels
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               88
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                                                                                                                                                                                                     Gaps
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ABZ97
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RESULT 1785
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                                                                                                                                                                                                                                                                                                                                                                                     have increased nuclease resistance and have enhanced hybrid binding oligomers are useful for diagnostic and therapeutic uses such as antisense technologies. The invention also discloses a method for the preparation of the oligomers with modifications as fully defined in specification. The present sequence represents a synthetically modifical oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified_base
                                                               Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene thera; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allerglung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          This
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                                                                                                                                                                                                                                                                                                                                                                 Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guanidinium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6534639-B1
                                            Homo
                                                                                                                                              Human nucleic acid sequence.
                                                                                                                                                                     17-OCT-2003
                                                                                                                                                                                          ABZ97252;
                                                                                                                                                                                                                ABZ97252 standard; DNA; 19 BP.
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                      WO200285308-A2
                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to novel synthetically modified oligomers that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2003-644179/61
                                                                                                                                                                                                                                                                                              427
                                            sapiens.
                                                                                                                                                                                                                                                                                                                     1 Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                  BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 13; 51pp; English.
                                                                                                                                                                                                                                                                                                                      Conservative
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/mod_base= OTHER
- "OTHER = 2
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/mod_base= OTHER
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Pred. No. 1.7e+03;
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Best Local :
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                                                                                                                                    antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its respiration, has oligo(s) antisense to specific gene(s) or its responding RNAs, and glucocorticoid or non-glucocorticoid steroid or constitutions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 2 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
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                                       WO200285308-A2
                                                                            Homo sapiens
                                                                                                                                                                                                Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory; steroid; ubiquinone; antiinflammatory; antia
                                                                                                                                                                                                                                                          Human nucleic acid sequence.
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                                                                                                                      inflammation;
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L, Shahabuddin
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RESULT 1787
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ID ABZ9733
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Note: The sequence data for this patent is not represented in the printed specification, but was obtained not segmences.
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                                                                                                                      Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel pharmaceutical composition, where the first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking
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                                                                   Homo sapiens.
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                                                                                                         inflammation;
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                                                                                                                                                                                                                                    IL4-R oligonucleotide sequence.
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Ŀ,  Shahabuddin S;
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Miller S,
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                                                                                                                                                                                                    Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
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L, Shahabuddin
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0; Mismatches
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                                                                                                                                                                                                                                                                   therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACA88902/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1789
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon functions. or regions within 3-10 mindional actions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or corresponding the corresponding that the corresponding the corresponding the corresponding that the corresponding the corresponding that the corresponding the corresponding the corresponding that the corresponding the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-229219/22
                                                                                                                                                                                                                        Genetic marker selection; multiplex PCR amplification; prenatal diagnostic testing; foetal sex determination; genetic identification; DNA profiling; DNA fingerprinting; forensic analysis; PCR; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                                                                                                                                       Selection and amplification of genetic markers PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JUL-2003
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                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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17; Conserv
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Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 1 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
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                                                                                                                                                                                                                                                                                                                                                                                 primer
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14-OCT-2002; 2002WO-AU001388

17-APR-2003

WO2003031646-A1

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ACA58281/c
ID ACA582
XX
AC ACA582
AC ACA582
XX
DT 09-JUN
XX
Human;
KW Human;
KW Chromo
KW D4S424
XX
D5 HOMO 8
XX
US2002
XX
I 19-DEC
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I 13-JUN
XX
PR 29-MAF
PR 20-OCT
PR 19-OCT
XX
PA (GINN)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 17
                                                                                                29-MAR-1996;
20-OCT-1997;
19-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention describes a method of selecting genetic markers as targets for nucleic acid sequence amplification comprising selecting each of the genetic markers according to a heterozygosity index of 0.5 or greater. Selecting and amplification of genetic markers are useful as targets for nucleic acid sequence amplification, for genetic testing or facilitating multiplex PCR amplification from limiting amounts of target nucleic acid. The methods are also useful for improving genetic diagnostic and screening methods, such as prenatal diagnostic testing, foetal sex determination or genetic identification, e.g. DNA profiling or DNA fingerprinting. The nucleic acid sequence amplification is also useful in forensic analysis of degraded, old, ancient and difficult samples that are difficult to amplify and identify. This sequence represents a PCR primer used in the selection and amplification of genetic markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             usersuling genetic markers as targets for nucleic acid sequence amplification, useful for improving genetic testing, e.g. fetal sex determination, comprises selecting each of the genetic markers according to a heterozygosity index.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-381725/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Findlay I, Matthews
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-OCT-2001; 2001AU-00008234.
12-OCT-2001; 2001AU-00008235.
   Ginns EI,
                                (GINN/) GINNS E I.
(EGEL/) EGELAND J A.
(PAUL/) PAUL S M.
                                                                                                                                                                13-JUN-2001; 2001US-00881012
                                                                                                                                                                                                                                 US2002192655-A1.
                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                 D4S424; D4S431;
                                                                                                                                                                                                                                                                                                                    chromosomal
                                                                                                                                                                                                                                                                                                                                                              Human familial bipolar affective disorder chromsome marker primer #229
                                                                                                                                                                                                                                                                                                                                                                                                09-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACA58281 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36; Page 39; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                              genotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCACCCAGGCTGGAGTGCA 658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCACCCAGGCCGGAGTTCA 1
 Egeland JA,
                                                                                                                                                                                                                                                                                                             region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                96US-0014334P.
97US-0062924P.
98US-00175158.
                                                                                                                                                                                                                                                                                              ion linked; locus associated with resistance; D4S402; D4S404; D11S394; D11S29; chromosome marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                 determination; familial bipolar affective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 C; 7
   Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mulcahy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 1.76
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.8; DB 1;
Pred. No. 1.7e+03;
     SM;
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Determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family comprises determining the genotype of e.g., chromosomal regions D4S402 and D4S424.
                                                                                                                                                                                      WPI; 2003-352708/33.
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Disclosure; Page 12; 79pp; English.

associated with increased or decreased resistance to camparise determining the genotype with at CC least one marker of at least one chromosomal region linked to a locus chromosomal regions are included of and localised between D45402 and CC D45424, D54511 and D45404, or D11539 and D11529. The invention also CC discloses a kit for determining a genotype associated with increased or CC decreased resistance to familial bipolar affective disorder, where the CC kit comprises markers for two or more of the chromosomal regions cited. CC The method and kit are useful for determining a genotype associated with increased or increased or decreased resistance to familial bipolar affective disorder with comprises markers for two or more of the chromosomal regions cited. CC in a family affected by bipolar affective disorder for in a family affected by bipolar affective disorder contribution of these chromosomal regions to bipolar affective disorder in an affective family member, and for assessing an increased or decreased risk of developing bipolar illness for a tested individual from CC an affected family. ACA58053-ACA58292 represent primers used in the The present invention relates to a method of determining to a method of determining a genotype decreased resistance to familial bipolar

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Sequence 19 BP; 3 A;
5 C; 7 G; 4 T; 0 U; 0 Other;
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á Matches Query Match Best Local Local Similarity 640 TCACCCAGGCTGGAGTGCA Conservative 1.6%; 0; Score 15.8; Pred. No. 1. 658 Mismatches 1.7e+03; 멂 -: Length 19; Indels 0 0,

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RESULT 1791
ADM65614
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19

TCACCCAGGCCGGAGTTCA 1

NRY polymorphism detection primer #515. ADM65614 standard; (first entry) DNA;

non-recombining ethnic origin determination; polymorphic site determination; chromosome; paternity region; / testing; tore human; NRY; forensic; diagnosis; PCR; primer;

Homo sapiens

US2003134285-A1

17-JUL-2003

01-NOV-2001; 2001US-00002623.

01-NOV-2000; 2000US-0245355P.

(OEFN/) OEFNER P J. UNDERHILL P A.

WPI; 2003-843259/78.

ĘŢ,

Underhill

PA:

Determining the ethnic origin of a male by obtaining a nucleic acid sample from the male and identifying at least two polymorphic markethe nucleic acid sample indicative of the ethnic origin of the male

ä

Claim 24; Page 57; 74pp; English.

The invention describes a method of determining the ethnic origin of a comprising obtaining a nucleic acid sample from the male, and condition at least two polymorphic markers in the nucleic acid sample conditative of the ethnic origin of the male, using at least one primer conditions are primer pairs given in the specification. Also described is a method of: identifying polymorphic sites in a nucleic acid; a kit for continuous the ethnic origin of an individual; determining the ethnic origin of an individual; determining the ethnic continuous bases including at continuous bases including at condition; and conditions of a human factor amplifying polymorphic regions of the Y chromosome comprisions at least 10 contiguous bases including at cold primer pairs for amplifying polymorphic regions of the Y chromosome given in the specification; nucleic acid primer pairs for amplifying polymorphic regions of the Y chromosome condition. The method is useful for determining the ethnic origin of a condition. The method is useful for determining the ethnic origin of a condition of a primer used to detect polymorphisms in the non-recombining region of the human Y chromosome (NRY).

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1056 CCACACCCCGCTAATTTT 1074

Query Match Best Local Matches

1 Similarity
17; Conserv

Conservative

0;

1.6%;

Score '15.8; DB 1; Pred. No. 1.7e+03; Mismatches

Length 19; Indels

0;

Gaps

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Sequence 19

BP; 4 A;

3 C; 7 G; 0 T; 5 U;

0 Other;

1.7e+03

Sequence 19 BP; 4 A;

8 C; 1 G; 6 T; 0 U; 0 Other;

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RESULT 1792
ADO14381/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                   20-FEB-2002;
11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                          expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; interleukin-2; ss.
                                                                                                                                                                                                                                                                                                                                                                  cytostatic; vasotropic; nephrotropic; cancer; restenosis; polycystic kidney disease; RNA interference; short interfering RNA; siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO14381 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human interleukin-2-targeted siNA upper strand SEQ ID NO:116.
New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of an interleukin g
                                                                                                                              05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                        11-FEB-2003; 2003WO-US004566.
                                                                                                                                                                                                                                                                            WO2003070744-A1
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                Мсвwiggen J,
                                                                                                                                                        29-AUG-2002;
                                                                                                                                                                                                                                                 28-AUG-2003
                                                                                           (RIBO-) RIBOZYME PHARM INC
                                        2003-731546/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACACCCAGCTCATTTT 19
                                                                                                                  2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
2002US-0440129P.
                                                                                                                                                                   2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
                                                                Beigelman
                                                                ۲
                                                              Thompson
 gene.
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The invention relates to short interfering nucleic acids (siNA) which CC downregulate expression of the human interleukin-2 gene by RNA CC interference. The siNAs may or may not comprise ribonucleotides and may CC interference. The siNAs may or may not comprise ribonucleotides and may CC be double or single stranded. They further comprise sense and antisense CC regions, or alternatively are assembled from a sense oligonucleotide and interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short CC interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) modified, CC can contain deoxyribonucleotides, and can be chemically synthesised, CC expressed from a vector or enzymatically synthesised. The invention also crelates to kits for the in vitro or in vivo delivery of siRNA; conjugates CC and/or complexes of siRNA; and vectors that express siNA. The siNAs are CC used to modulate expression of the interleukin-2 gene in cells, tissue CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and CC transplants for the treatment of a variety of conditions. They may be CC used for treating cancer, restenses and polycystic kidney disease. The cientification and validation, genetic engineering, pharmacogenomics, containing gene function, and gene mapping (e.g., of single nucleotide CC polymorphisms). The present sequence represents the upper strand of a human interleukin-2-targeted double-stranded siNA, which is identical to the interleukin-2-targeted double-stranded siNA, which is identical to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; SEQ ID NO 116; 138pp; English.
interleukin-2 transcript target sequence.
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1.6%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                   1121 TCAAACTCCTGACCTCAGG 1139
19
                                        0; Mismatches
                                                  Score 15.8;
Pred. No. 1.
                                                 .7e+03;
                                                            DB 1;
                                                          Length 19;
                                         Indels
                                         0,
                                         Gaps
                                          0
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ADO14386/c
                                            06-JUN-2002;
29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                      cytostatic; vasotropic; nephrotropic; cancer; restenosis; polycystic kidney disease; RNA interference; short interfering RNA; siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
                                                                                              20-FEB-2002;
11-MAR-2002;
                                                                                                                                                                                   WO2003070744-A1
                                                                                                                                                                                                                                               expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics;
                                                                                                                                                                                                                                                                                                                                     Human interleukin-2-targeted siNA upper strand SEQ ID NO:121
                                                                                                                                                                                                                                                                                                                                                               01-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                              ADO14386 standard; RNA; 19
                                                                                                                                   11-FEB-2003; 2003WO-US004566
                                                                                                                                                          28-AUG-2003.
                                                                                                                                                                                                          Homo sapiens
           (RIBO-)
                                                                                                                                                                                                                                   function
           RIBOZYME PHARM INC
                                 ; 2002US-0358580P.
2002US-0363124P.
; 2002US-0386782P.
; 2002US-0406784P.
; 2002US-0408378P.
; 2002US-0409293P.
; 2002US-0409293P.
; 2003US-0440129P.
                                                                                                                                                                                                                                   analysis; gene mapping;
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RESULT 1794
ADO14514
ID ADO1451
  맑
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          downregulate expression of the human interleukin-2 gene by RNA
Chiterference. The siNAs may or may not comprise ribonucleotides and may
ceed be double or single stranded. They further comprise sense and antisense
ceed regions, or alternatively are assembled from a sense oligonucleotide and
can antisense oligonucleotide. Specifically, the siNAs include short
interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short
ceed interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short
ceed can contain deoxyribonucleotides, and can be chemically synthesised,
cexpressed from a vector or enzymatically synthesised. The invention also
cexpressed from a vector or enzymatically synthesised. The invention also
cexpressed from a vector or enzymatically synthesised. The invention also
cexpressed from a vector or enzymatically synthesised. The invention also
cexpressed from a vector or in vivo delivery of siRNA; conjugates
and/or complexes of siRNA; and vectors that express siNA. The siNAs are
cused to modulate expression of the interleukin-2 gene in cells, tissue
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
cransplants for the treatment of a variety of conditions. They may be
cused for treating cancer, restenosis and polycystic kidney disease. The
classification and validation, genetic engineering, pharmacogenomics,
studying gene function, and gene mapping (e.g., or single nucleotide
polymorphisms). The present sequence represents the upper strand of a
the interleukin-2-targeted double-stranded siNA, which is identical to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 17
20-FEB-2002; 2002US-0358580P.
11-MAR-2002; 2002US-0363114P.
06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                cytostatic; vasotropic; nephrotropic; cance; restenosis; polycystic kidney disease; RNA interference; short interfering nucleic acid, siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of an interleukin gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen
                                                                                                                                                                                                                                                                   expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; interleukin-2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example
                                                                                                       11-FEB-2003; 2003WO-US004566
                                                                                                                                                                                         WO2003070744-A1
                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human interleukin-2-targeted siNA lower strand SEQ ID NO:249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO14514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO14514 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to short interfering nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interleukin-2 transcript target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               729 AGTAGCTGGGACTACAGGC 747
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 121; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beigelman
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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regions, or alternatively are assembled from a sense oligonucleotide and annisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short can contain deoxyribonucleotides, and can be chemically synthesised, can contain deoxyribonucleotides, and can be chemically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA, and vectors that express siNA. The siNAs are caplants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis and polycystic kidney disease. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a contain the contains and substrained as a contain the contains and substrained siNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-SEP-2002;
09-SEP-2002;
15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human interleukin-2 gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-731546/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 3; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New short
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interfering of cancer, d
BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-0408378P
2002US-0409293P
2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beigelman L,
  4 C; 7 G; 0 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        downregulates expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid, useful e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thompson
     3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o
f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for treatment as
f an interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
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밁 5 Query Match Best Local S Matches 14 Local Similarity 729 AGTAGCTGGGACTACAGGC 747 <u>بــ</u> AGUGGCUAGGACUACAGGC 19 Conservative 1.6**%**; 73.7**%**; ω --Score 15.8; Pred. No. 1. Mismatches 1.7e+03; DB 1; Length 19; Indels 0 Gaps

0

ADO14509 ID ADO1 RESULT 1795 01-JUL-2004 ADO14509 standard; (first entry) RNA; 19

Human interleukin-2-targeted siNA lower strand SEQ ID NO:244

cytostatic; vasotropic; nephrotropic; cancer; restenosis; polycystic kidney disease; RNA interference; short interfering RNA; siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shrNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; Homo function analysis; gene mapping; human; interleukin-2; ss

WO2003070744-A1

28-AUG-2003

11-FEB-2003; 2003WO-US004566

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cc be double or single stranded. They further comprise sense and antisense cc regions, or alternatively are assembled from a sense oligonucleotide and cc an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised. Cc can contain deoxyribonucleotides, and can be chemically synthesised, crelates to kits for the in vitro or in vivo delivery of siRNA; conjugates co wised to modulate expression of the interleukin-2 gene in cells, tissue cx explants or organisms (e.g., by ex vivo gene therapy), or in grafts and creating cancer, restenosis and polycystic kidney disease. The cused for treating cancer, restenosis and polycystic kidney disease. The calls are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human interleukin-2-transed Annabaservanda sina
 RESULT 1796
ABD30364
                                                                                                                                                                                                                                                                                                                                                                                   밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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11-MAR-2002;
16-JUN-2002;
06-JUN-2002;
29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human interleukin-2 gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may
                           respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory distease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-731546/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                      Human IL4-R derived oligonucleotide
                                                                                                                                                                                                                                                                                            ABD30364 standard; DNA; 19 BP
                                                                                                                                                                                                                         29-JUL-2004
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                 1121 ТСАААСТССТБАССТСАББ 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         interleukin-2-targeted double-stranded siNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 Similarity
13; Conser
                                                                                                                                                        antisense;
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                                                                                                                                                                                                                                                                                                                                                                                   UCAAACUCCUGGCCUCAAG 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 244; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
2002US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0358580P.
2002US-0363124P.
                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                    bronchoconstriction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               downregulates expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid, useful e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                    4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                        SEQ ID 12575
                                                                                                                                                      allergy; hyposecretion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for treatment ar
f an interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                        pain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
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XXXXXX UXXXXX

ABD30365; ABD30365

29-JUL-2004

(first entry)

RESULT 1797 ABD30365

standard; DNA; 19

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Н

CACCACGCCCGGCTTCTCT 19

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C expression of a target polypeptide associated with lung airway or lung construction or cancer and can be anti-sense to the corresponding mRNA.

C The invention also describes a kit, that comprises: (a) a delivery constitution also describes a kit, that comprises: (a) a delivery constitution and also describes a kit, that comprises: (a) a delivery constitution for adding a carrier and for use of the kit. The composition confirmed and cytostatic activity, is a sense to analyze in hypotensive, immunosuppressive and cytostatic activity, is a constitution accomprises oligo and is administered to reduce the production corrected the amount of target polypeptide present in the lungs. The composition comprises oligo and is administered to reduce the production corrected the amount of target polypeptide present in the lungs. The complanary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction.
              S
                                                      Matches
                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) recept surfactant depletion or hyposecretion, when administered to a mammal oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                            inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15; SEQ ID NO 12575; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Miller
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200285309-A2
                                                                                                                                Sequence 19
                                                                                                                                                                                                      thymidines present in the target RNA serves to prevent the breakdown the oligonucleotides into products that free adenosine into the syste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                comprising oligonucleotides, effective for alleviating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel composition (a) a first active agent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-093058/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EPIG-)
                                                                        Local
885 CACCACGCCCGGCTTATTT 903
                                                                                                                                                                                      lung,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ູດ
                                                    l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Li Y,
                                                                                                                                BP; 2 A;
                                                                                                                                                                      unwanted effects
                                                                                                                                                                                        brain, heart,
                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sandrasagra A, K
L, Shahabuddin S;
                                                                      1.6%;
89.5%;
                                                                                                                                  10
                                                                                          . 6%;
                                                                                                                                C; 3
                                                                                                                                                                      kidney, etc, tissue environment cts due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for treating asthma, has antisense
                                                      0; Mismatches
                                                                                                                                G; 4 T; 0 U;
                                                                        Score 15.8; DB 1
Pred. No. 1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Katz E,
                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pabalan
                                                                                                                                  0 Other;
                                                                                            Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ç
                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aguilar D;
                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptors,
                                                        Gaps
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CC expression of a target polypeptide associated with lung airway or lung conversion of a target polypeptide associated with lung airway or lung conversion or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery. CC device, in separate containers, (b) the oligonuclectides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The CC reduce the amount of target polypeptide present in the lungs. The CC inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, cc inflammation, allergies, asthma, impeded respiration, respiratory CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonary brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to,it
Best Local Similarity Matches 17; Conserv
                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
respiratory tract inflammation; adenosine sensitivity; lung; cancer;
                                                                                            Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human IL4-R derived oligonucleotide SEQ ID 12576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                surfactant depletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; SEQ ID NO 12576; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li Y, Sa
, Tang L,
                                                                                            BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sandrasagra A, K
L, Shahabuddin S;
                     89.5%;
                                                                                            11 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or hyposecretion, when administered to a mammal.
                       Score 15.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Katz E,
                       1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pabalan
                                            Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aguilar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ö
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RESULT 1798
ADG28485
ID ADG2848
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                           S
                                                                         Query Match
Best Local
                                                             Matches
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02-SEP-1994;
28-FEB-1996;
                                                                                                                                                               The invention describes an oligonucleotide comprising several nucleotides covalently linked together by internucleotide linkages. At least one of the nucleotides is linked to an adjacent nucleotide by 2',5',5', internucleotide linkage and bears a 3'-substituent. The oligonucleotides are useful; as antisense oligonucleotides, in pharmaceutical compositions; for treating organism that utilises RNA-DNA transcription or RNA-protein translation, bacteria, yeast, protozoa, algae and warm-blooded animals; for developing diagnostic and therapeutic agents. The modified oligonucleotide exhibits improved properties of nuclease resistance and hinding affinity. The oligonucleotides are easy to synthesise and exhibit good properties of nuclease resistance and hybridisation to target nucleic acids. The oligonucleotide is potent antisense agent with longer duration of action. This sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New oligonucleotide comprising at least one 2',5'-internucleotide useful for treating organisms having disease caused by undesired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADG28485
                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                      Example 54; SEQ ID NO 6; 30pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                     production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-079586/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-NOV-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antibacterial; protozoacide; antialgal; fungicide;
internucleotide linkage; 2',5'-internucleotide linkage; 3'-substituent;
antisense; pharmaceutical; RNA-DNA transcription;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified oligonucleotide seq id 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADG28485 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nuclease resistance; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA-protein translation; infection; diagnostic; therapeutic;
                                                                                                                                                       invention.
                              427
                                                             17;
,_
                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTGCCCGCCTCAGCCTCC 19
                 TTTTTATTTTATTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                   of protein e.g. bacteria, yeast, protozoa and algae
                                                                                                                      BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94WO-US010131.
96US-00602862.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-00115043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-00117363.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9908-00435806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA; 19
                                                                           1.6%;
89.5%;
                                                           0,
                                                                             Pred. No.
                                                                                           Score
                                                              Mismatches
                                                                                        15.8;
                                                                             .7e+03
                                                                                          DB 1; Length 19;
                                                              Indels
                                                              0
                                                             Gaps
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0;

S

839 TCTGCCTGCCTCGGCCTCC 857

0;

Mismatches

Indels

0;

Gaps

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RESULT 1800
ADG48004
ID ADG4800
XX
AC ADG4800
XC ADG4800
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                                                                                                                                                       Query Match
Best Local
                                                                                                                                               Matches
                                                                                                                                                                                              The present invention relates to novel oligonucleotides comprising several nucleotide units which are specifically hybridisable with a selected sequence of RNA or DNA wherein at least one of the nucleotide moieties of the oligomer is modified to include a guandinium group. These oligonucleotides are useful for diagnostic, therapeutic and investigative purposes. The present sequence is an oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hybridisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADG47994 standard;
                                                                                                                                                                                                                                                                                       nucleic
                                                                                                                                                                                                                                                                                             New oligomers containing guanidinium groups, useful for modulating expression by hybridizing oligomer with single- or double-stranded
                                                                                                                                                                                                                                                                                                                         WPI; 2004-031184/03
                                                                                                                                                                                                                                                                                                                                         Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                     07-JUL-1999; 99US-00349040.
07-JUL-2000; 2000US-00612531.
                                                                                                                                                                                                                                                                                                                                                                                                                              20-SEP-2002; 2002US-00247893
                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003092046-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADG47994;
                 Oligonucleotide
                                                                                                                                                                                                                                                                      Example 26; SEQ ID NO 3; 54pp; English
                                                                                                                                                                                                                                                                                                                                                                   (MANO/)
(COOK/)
(PRAK/)
                                                                                                                                                                                 Sequence
Hybridisation; diagnosis; therapeutic;
                                  11-MAR-2004
                                                   ADG48004;
                                                                   ADG48004
                                                                                                                                                                                                                                                                                                                                                           (MOHA/)
                                                                                                                               427
                                                                                                             _
                                                                                                                                               17;
                                                                                                                                                                                                                                                                                                                                                           MOHAN V.
                                                                                                                                                                                                                                                                                                                                                                   COOK P D.
PRAKASH T P.
                                                                                                                                                                                                                                                                                                                                                                                    MANOHARAN M.
                                                                                                                                                       Similarity
                                                                     standard;
                                                                                                                        TTTTTATTTTATTTTTTT 445
                                                                                                                                                                                 19 BP; 0
                                                                                                             TTTTTTTTTTTTTTTTT 19
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                  (first entry)
                                                                                                                                                                                                                                                                                                                                          Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; therapeutic; investigation;
                                                                                                                                                                                                                                                                                                                                                                                                              99US-00349040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers 16. .19
                  #11 used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'-0-{2-(guanidinium)ethyl] thymidine"
                                                                                                                                                                                 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA; 19
                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                                                       1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ij
                                                                     19
                                                                                                                                                                                                                                                                                                                                           Prakash
                  ä
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                                                                     ВP
                                                                                                                                              0;
                   the
                                                                                                                                               Score 15.8; D
Pred. No. 1.7e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exemplification of the invention
                                                                                                                                                                                                                                                                                                                                           ŢP,
                   exemplification of
                                                                                                                                                                                                                                                                                                                                           Mohan
 investigation;
                                                                                                                                                        .7e+03;
                                                                                                                                                               DB 1;
                                                                                                                                                               Length 19;
                                                                                                                                                Indels
                 the invention
                                                                                                                                               0;
                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                0
                                                                                                                                                                                                                                       SXCCCCCCCXxxxqqqxxqxxqxxqxxxxxxxxxxxqxxqxqxq
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   RESULT 1801
ADG47998
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Query Match
Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        selected sequence of RNA or DNA wherein at least one of the nucleotide moieties of the oligomer is modified to include a guanidinium group. These oligonucleotides are useful for diagnostic, therapeutic and investigative purposes. The present sequence is an oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligomers containing expression by hybridizing nucleic acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-JUL-1999; 99US-00349040
07-JUL-2000; 2000US-00612531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-SEP-2002; 2002US-00247893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003092046-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
Key
modified_base
                                               Synthetic
                                                                                                              Oligonucleotide #5 used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to novel oligonucleotides comprising several nucleotide units which are specifically hybridisable with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-031184/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2003.
                                                                                 Hybridisation;
                                                                                                                                                11-MAR-2004
                                                                                                                                                                               ADG47998;
                                                                                                                                                                                                             ADG47998 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MANO/) MANOHARAN M.
(COOK/) COOK P D.
(PRAK/) PRAKASH T P.
                                                                                                                                                                                                                                                                                                                              427
                                                                                                                                                                                                                                                                                             \vdash
                                                                                                                                                                                                                                                                                                                                                              l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOHAN
                                                                                                                                                                                                                                                                                                                                                                                                                               BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 13; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cook PD,
                                                                                                                                                (first
                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                 diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note=
19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'mod_base= OTHER
'note= "2'-O-(2-(guanidinium)ethyl] thymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mod.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                             A; 0 C; 0 G; 19 T; 0 U;
                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _base= OTHER
e= "2'-0-[2-(guanidinium)ethyl] thymidine"
                                                                                                                                                                                                                                                                                                                                                                            1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prakash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            guanidinium groups, useful for modulating yoligomer with single- or double-stranded
                                                                                 therapeutic;
                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                              445
                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                               Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ä,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mohan
                                                                                   investigation;
                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <
                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                     RESULT 1802
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to novel oligonucleotides comprising several nucleotide units which are specifically hybridisable with a selected sequence of RNA or DNA wherein at least one of the nucleotide moieties of the oligomer is modified to include a guanidinium group. These oligonucleotides are useful for diagnostic, therapeutic and investigative purposes. The present sequence is an oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003092046-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New oligomers containing guanidinium groups, useful for modulating expression by hybridizing oligomer with single- or double-stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JUL-1999; 99US-00349040.
07-JUL-2000; 2000US-00612531.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-SEP-2002; 2002US-00247893
           07-JUL-1999;
                                                                                                                                          Synthetic
                                                                                                                                                              ss; guanidinium
2-0-guanidinium
                                                                                                                                                                                                Guanidinium
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 26; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-MAY-2003
                                15-JUL-2003.
                                                     US6593466-B1
                                                                                                        modified_base
                                                                                                                                                                                                                     25-MAR-2004
                                                                                                                                                                                                                                           ADH42933;
                                                                                                                                                                                                                                                                 ADH42933 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MANO/) MANOHARAN M.
(COOK/) COOK P D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRAK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2004-031184/03.
                                                                                                                                                                                                                                                                                                                                           427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) COOK P D.
) PRAKASH T P.
) MOHAN V.
                                                                                                                                                                                                                                                                                                                       ۳
                                                                                                                                                                                                                                                                                                                                                                l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acids.
                                                                                                                                                                                                                                                                                                                                         TTTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                         BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                functionalised oligonucleotide ISIS #109973.
                                                                                                                                                                                                                                                                                                                                                                1.6%;
llarity 89.5%;
Conservative
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cook PD,
           99US-00349040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ID NO 7; 54pp; English.
                                                                                                                                                              functionalised nucleotide; guanidinium;
ethyl; increased binding affinity.
                                                                                                          Location/Qualifiers
                                                                           /mod_ba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "2'-O-[2-(guanidinium)ethyl] thymidine"
                                                                                  /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                 DNA;
                                                                           "OTHER
                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Prakash
                                                                                                                                                                                                                                                                 ₽P
                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                Score 15.8; D
Pred. No. 1.7e
0; Mismatches
                                                                                                                                                                                                                                                                                                                       19
                                                                           11
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                                                                          2-0-[2-(guanidinium)-ethyl] modified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mohan V;
                                                                                                                                                                                                                                                                                                                                                                           .7e+03;
                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                 0
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RESULT 1803
ADH42931
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a guanidinium functionalised nucleotide compounds. The guanidinium functionalised nucleotide compounds are used for preparation of oligomers useful for diagnostic, therapeutic and investigative applications. The 2-0-guanidinium ethyl modification increases binding affinity to a target. The present sequence represents guanidinium functionalised oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New guanidinium functionalized oligomers used for diagnostic,
                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                  ss; guanidinium
2-0-guanidinium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 26; SEQ ID NO 5; 40pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-118052/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-JUL-1999;
                                     New guanidinium fur 
oligomers used for
                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                   Guanidinium functionalised oligonucleotide ISIS #109990
                                                                                                                                                                                                                                                                                                                                                        25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                            ADH42931;
                                                                     WPI; 2004-118052/12.
                                                                                                                                 07-JUL-1999;
                                                                                                                                                      07-JUL-1999;
                                                                                                                                                                                               US6593466-B1.
                                                                                                                                                                                                                                                                                                                                                                                                ADH42931 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS
                            applications.
                                                                                          Manoharan M,
                                                                                                             (ISIS-) ISIS
                                                                                                                                                                           15-JUL-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTATTTATTTTTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                              PHARM INC
                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cook PD,
                                                                                         Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-00349040
                                                                                                                                  9908-00349040
                                                                                                                                                      99US-00349040
                                                                                                                                                                                                                                                                                                     ethyl; increased binding
                                       functionalized for diagnostic,
                                                                                                                                                                                                                                                                                                              functionalised nucleotide;
                                                                                                                                                                                                                             /mod_
                                                                                                                                                                                                                    /note=
                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                        entry)
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                                                                                                                                                                                                                              base= OTHER
                                                                                                                                                                                                                    "OTHER
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                                                                                          Prakash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                       nucleotide compounds useful for preparing therapeutic and investigative
                                                                                                                                                                                                                   = 2-0-[2-(guanidinium)-ethyl] modified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleotide compounds useful for preparing therapeutic and investigative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TP,
                                                                                       TP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mohan
                                                                                           Mohan
                                                                                                                                                                                                                                                                                                      e; guanidinium;
affinity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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Example 26; SEQ

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40pp;

English

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The invention relates to a guanidinium functionalised nucleotide compounds. The guanidinium functionalised nucleotide compounds are understand to the compounds of the graphication of oligomers useful for diagnostic, therapeutic and investigative applications. The 2-O-guanidinium ethyl modification increases binding affinity to a target. The present sequence represeguantidinium functionalised oligonucleotide.

represents

are used

Matches Query Match Best Local

Similarity

1.6%;

Score 15.8; DB 1; Pred. No. 1.7e+03;

DB 1; 0 Other;

Length 19;

Indels

0

0

Conservative

<u>.</u>.

Mismatches

427

TTTTTATTTTTTTTT 445

Sequence

19

BP; 0

ð,

0

C; 0

G; 19

H

0 U;

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RESULT 1804
ADH42932
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                                                                                                                                                                                                                                                                                                                                                                                                          ss; guanidinium
2-O-guanidinium
                The invention relates to a guanidinium functionalised nucleotide compounds. The guanidinium functionalised nucleotide compounds are for preparation of oligomers useful for diagnostic, therapeutic and investigative applications. The 2-O-quanidinium ethyl modification increases binding affinity to a target. The present sequence represquantidinium functionalised oligonucleotide.
                                                                                                                                                                                                                              07-JUL-1999;
                                                                                                                                                                                                                                                 15-JUL-2003.
                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                         Guanidinium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH42932 standard;
                                                                                                                            New guanidinium
                                                                                                                                                                                                           07-JUL-1999;
                                                                                                                                                                                                                                                                     US6593466-B1
                                                                                     Example 26; SEQ ID
                                                                                                        applications.
                                                                                                                                                                  Manoharan M,
                                                                                                                                                2004-118052/12
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                                                                                                                                                                                       SISI
                                                                                                                  used
                                                                                                                                                                                                                                                                                                                                                                                                                                         functionalised oligonucleotide ISIS #109989
                                                                                                                                                                                       PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                   Cook PD,
                                                                                                                    for
                                                                                                                                                                                                            99US-00349040
                                                                                                                                                                                                                               9905-00349040
                                                                                                                  functionalized for diagnostic,
                                                                                                                                                                                                                                                                                        /*tag= b
/mod_base= OTHER
/----- "OTHER =
                                                                                                                                                                                                                                                                                                                       /note=
19
                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
17
                                                                                                                                                                                                                                                                                                                                                                                                           functionalised nucleotide; guanidinium;
ethyl; increased binding affinity.
                                                                                                                                                                                                                                                                                                                                       _pod_
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                    4; 40pp; English.
                                                                                                                                                                                                                                                                                                                                "OTHER
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                                                                                                                                                                   Prakash TP,
                                                                                                                                                                                                                                                                                                                               OTHER
HER =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                  nucleotide compounds useful for preparing therapeutic and investigative
                                                                                                                                                                                                                                                                                         2-O-[2-(guanidinium)-ethyl] modified'
                                                                                                                                                                                                                                                                                                                               2-O-[2-(guanidinium)-ethyl] modified"
                                                                                                                                                                    Mohan
                                                                                                                                                                    <
                                                          compounds are used
                             represents
                                                  and
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Query Match

Sequence

19

B₽;

0 A;

0 C; 0 G;

T; 0 U;

문

19

RESULT 1806 ADI12546/c

1.6%:

Score 15.8; 19

DB 1; 0 Other;

Length 19;

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ADH76758/c
ID ADH767
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Matches 17; Conserv
                                                                                                                      The invention relates to a novel diagnostic polynucleotide composition.

The polynucleotide composition comprises: a sequence encoding a polypeptide with defined sequences given in the specification; a sequence capable of hybridizing to a melanin-concentrating hormone receptor 1 (MCHR1) gene; a polynucleotide encoding an MCHR1 polypeptide; or a sequence comprising one or more of the nucleotide exchanges (SNP's) given the specification and at least 8 bases of surrounding sequence of the CHR1 gene. The composition has anorectic activity. The polynucleotide composition may be used in gene therapy to treat the disorders of the invention. The composition is useful for diagnosing obesity related to the presence of a molecular variant of the MCHR1 gene or a susceptibility to the disorder. The MCHR1 protein or polynucleotide is useful for preparing a medicament for treating or preventing obesity related to the presence of a molecular variant of the MCHR1 gene. This polynucleotide is useful for the molecular variant of the MCHR1 gene. This polynucleotide
                                        Query Match
Best Local
                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Platzer M,
Reichwald I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               melanin-concentrating hormone receptor 1; MCHR1;
obesity; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH76758;
                                                                                                                                                                                                                                                                                                                                                                              New diagnostic composition, useful presence of a molecular variant of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2002; 2002EP-00012569.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003104489-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCHR1 genomic sequence analysis primer #67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH76758 standard;
                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                         Example
                                                                                                                                                                                                                                                                                                                                                                    the disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-062377/06
                                                                                                            represents an MCHR1 primer of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYPH-) UNIV PHILIPPS MARBURG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
  797
                                          Similarity
                                                                                                                                                                                                                                                                                                                                         2; Page 43; 76pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTATTTATTTTTTT
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 CACCATGTTCGCCAGGTTG 815
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Platzer C,
                                                                                   ВP;
                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003WO-EP005917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                   4 A; 5 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry
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                                          1.6%;
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                                                                                                                                                                                                                                                                                                                                         English
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); Mismatches
                                          Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                   5 T; 0 U; 0 Other;
                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                  for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hebebrand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                  diagnosing
MCHR1 gene
                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  anorectic; gene therapy;
                                                      Length 19;
                                                                                                                                                                                                                                                                                                                                                                                    obesity related to the or a susceptibility to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                Indels
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ADJ59152
ID ADJ5
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DT 06:
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                                                                                                                                                                                                                                                   RESULT 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention relates to a novel method for predicting a predisposition to cancer in a patient by detecting large deletions in the human tumour suppressor gene identified as the breast cancer susceptibility gene 1 (BRCA1). Specifically, it refers to deletions that result from the unequal crossover between a pair of repetitive Alu sequences in the BRCA1 gene, such that the recombined nucleotide sequence containing the celetion indicates a predisposition to breast and overian cancer. The present invention describes newly discovered deletion mutations that are believed to be deleterious and cause significant alterations in the structure or biochemical function of BRCA1. Accordingly, it provides methods for detecting such mutants, as well as identifying and screening for cytostatic compounds useful for treating or preventing cancers associated with a BRCA1 genetic variant. This polymucleotide is a mutant human BRCA1 genomic DNA fragment that arises as a result of a crecombination event (deletion 4), which causes the omission of exons 16 crecombination in an exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Predicting a predisposition to cancer in a patient comprising detecting deletion in the BRCA1 gene that results from the unequal crossover between a pair of repetitive sequences in the BRCA1 gene.
                               Oligonucleotide associated to
                                                                                       06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUN-2002; 2002US-0387132P.
09-AUG-2002; 2002US-0402430P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-JUN-2003; 2003WO-US018098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ovarian cancer; recombination; mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mutant human BRCA1 genomic DNA resulting from deletion 4 SeqID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-APR-2004
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                                                                                                                                                                                                ADJ59152 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 29; 59pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer; human; tumour suppressor;
ast cancer susceptibility gene 1; BRCA1; repetitive Alu;
                                                                                                                                                                                                                                                                                                                                                                                         671
                                                                                                                                                                                                                                                                                                                                   19
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                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                         TGGCTCACTGCAACCTCTG 689
                                                                                                                                                                                                                                                                                                                                   TGGGTCACTGAAACCTCTG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 5 A;
                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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AC ADD7
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CACCACGCCCGGCTTCTCT

885 CACCACGCCCGGCTTATTT 903

interleukin; IL-4 receptor; IL-5 receptor; lung disease; airway inflammation; allergy; asthma; impeded respiration; cystic fibrosis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;

Oligonucleotide

associated

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IL 4R

#8.

06-MAY-2004

(first entry)

ADJ59153;

ADJ59153 standard;

DNA;

19

ВP

Matches Query Match

17;

Conservative

0

Mismatches

Local

Similarity

1.6%;

Score 15.8; Pred. No. 1

.7e+03; DB 1;

Length 19; Indels

0,

Gaps

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interleukin; IL-4 receptor; IL-5 receptor; lung disease;
airway inflammation; allergy; asthma; impeded respiration;
cystic fibrosis; acute respiratory distress syndrome;
pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                    of a subject an effective amount of an inhibitor. The uligonucleotide is useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is chosen from airway inflammation, allergy(les), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (COPD), allergic rhinitis (AR), acute respiration, bronchitis, airway (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
                                                                                                                                                                                                                                                                                                                                                                                 initiation codon, coding region with 2-10 nucleotides or 5 end and 5 end of nucleic acid target comprising gene(s) chosen from e.g. end of nucleic acid target comprising gene(s) chosen from e.g. interleukin (II) 4 receptor, II-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways respiratory or lung disease, which involves administering to the airways and the salts of the salts of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes e.g., CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease e.g., asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-203534/19.
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Shahabuddin S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2002; 2002US-0399076P
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                                                                                                         obstruction. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to an oligonucleotide anti-sense to e-
initiation codon, coding region with 2-10 nucleotides of 5'-end and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 8; 85pp;
   BP; 2 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
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f L,
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H, Cong H;
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                                                                                                             represents an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC The present invention relates to an oligonucleotide anti-sense to e.g., cc initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-cc end of nucleic acid target comprising gene(s) chosen from e.g. cc interleukin (II)-4 receptor, IL-5 receptor or salts of the coligonucleotide and optionally surfactant operatively linked to the coligonucleotide. The method is useful for preventing or treating a cc respiratory or lung disease, which involves administering to the airways cf a subject an effective amount of an inhibitor. The oligonucleotide is cc useful for production of a medicament for the prevention and/or treatment cf a respiratory or lung disease. The respiratory or lung disease is cc chosen from airway inflammation, allergy(ies), asthma, impeded cc respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (CODD), allergic rhinitis (RR), acute respiratory distress syndrome (RRDS), pulmonary hypertension, lung inflammation, bronchitis, airway construction. The present sequence represents an oligonucleotide of the
RESULT 1809
ADJ61646
                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                interleukin; IL-4 receptor; IL-5 receptor; lung disease;
airway inflammation; allergy; asthma; impeded respiration;
cystic fibrosis; acute respiratory distress syndrome;
pulmonary hypertension; lung inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes e.g., CCR1, RANTES, NCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2002; 2002US-0399076P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-JUL-2003; 2003WO-US023509
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19
                                            Synthetic.
                                                                                                                                                               IL-4Ra receptor
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              WO2004011613-A2
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                                                                                                                                                                                                                                                                                                                                                                                           l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g., asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 9; 85pp; English
                                                                                                                                                                                                                                                        standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                               TCTGCCTGCCTCGGCCTCC 857
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                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 1
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                                                                                                                                                                                                                                                                                                                                                                                                         1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 C; 3
                                                                                        lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                           0;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aguilar D,
                                                                                                                                                                                                                                                                                                                                                                                                            .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Length 19;
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29-JUL-2002; 25-JUL-2003;

2002US-0399076P 2003WO-US023509

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ADJ61645
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Best Local S
Matches 17
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interleukin (II)-4 receptor, II-5 receptor or salts of the
oligonucleotide and optionally surfactant operatively linked to the
oligonucleotide. The method is useful for preventing or treating a
respiratory or lung disease, which involves administering to the airways
of a subject an effective amount of an inhibitor. The oligonucleotide is
useful for production of a medicament for the prevention and/or treatment
of a respiratory or lung disease. The respiratory or lung disease is
chosen from airway inflammation, allergy(ies), asthma, impeded
respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
(CODD), allergic rhinitis (AR), acute respiratory distress syndrome
(ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
obstruction. The present sequence represents a receptor of the invention.
                                                                                                                                                                          interleukin; IL-4 receptor; IL-5 receptor; lung disease; airway inflammation; allergy; asthma; impeded respiration; cystic fibrosis; acute respiratory distress syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-FEB-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes
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05-FEB-2004
                                            WO2004011613-A2
                                                                                                                                                     pulmonary
                                                                                                                                                                                                                                                                      IL-4Ra receptor #2
                                                                                                                                                                                                                                                                                                                      06-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ICR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       839
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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din S,
                                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGCCTGCCTCGGCCTCC 857
                                                                                                                                                       hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 codons and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       coding region with 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sandrasagra
H, Cong H;
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                                                                                                                                                                                                                                                                                                                      entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.6%;
                                                                                                                                                         lung inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.8; DB 1
Pred. No. 1.7e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            English.
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                                                                                                                                                              bronchitis; oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to an oligonucleotide anti-sense to e.g., initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-end of nucleic acid target comprising gene(s) chosen from e.g. interleukin (II)-4 receptor, II-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is chosen from airway inflammation, allergy (its), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (COPD), allergic rhinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway (ARDS)
                                                                                                                                                                                    07-AUG-1998;
06-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes e. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nyce JW, T
Shahabuddin
New 2'.-O-aminoethylthioethyl-modified ribosyl nucleosides useful a monomer for the synthesis of modified anti-sense oligonucleotides.
                                                            WPI; 2004-106293/11.
                                                                                                                                                                                                                                                  11-APR-2002;
                                                                                                                                                                                                                                                                                           06-JAN-2004.
                                                                                                                                                                                                                                                                                                                                  US6673912-B1
                                                                                                                                                                                                                                                                                                                                                                                                                 antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                      2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified antisense oligonucleotide #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ77769 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 2 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease e.g., asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                             (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 885 CACCACGCCCGGCTTATTT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACCACGCCCGGCTTCTCT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tang L, Sai
in S, Lu H,
                                                                                                  Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 2501; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                  2002US-00121135
                                                                                                                                             PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                    98US-00130566.
99US-00370625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present sequence represents a receptor of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sandrasagra
H, Cong H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aguilar D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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RESULT 1812
ADJ77789
ID ADJ7777
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Best Local S
Matches 17
                                       The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl nucleosides. The modified ribosyl nucleosides are used as monomers for the synthesis of modified antisense oligonucleotides, which are useful in diagnosis and therapeutics (e.g. in gene therapy, for treating organisms having a disease associated by the undesired production of proteins) and as research reagents. The oligonucleotides obtained from the monomers show enhanced hybrid binding affinity towards targeted DNA or RNA and resistance towards nucleases. This sequence represents a modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  as research reagents. The oligonucleotides obtained from the monomers show enhanced hybrid binding affinity towards targeted DNA or RNA and resistance towards nucleases. This sequence represents a modified antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleosides. The modified ribosyl nucleosides are used as monomers for the synthesis of modified antisense oligonucleotides, which are useful ir diagnosis and therapeutics (e.g. in gene therapy, for treating organisms having a disease associated by the undesired production of proteins) and
                                                                                                                                                                                                                    New 2'-0-aminoethylthioethyl-modified ribosyl nucleosides useful as monomer for the synthesis of modified anti-sense oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                             07-AUG-1998;
06-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6673912-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADJ77789 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID
                                                                                                                                                                                      Disclosure; SEQ ID NO 26; 26pp; English.
                                                                                                                                                                                                                                                                                                Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                          11-APR-2002; 2002US-00121135
                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2'-0-aminoethylthioethyl-modified ribosyl nucleoside;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADJ77789;
                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTTTTTTTTTTTTTTTT 19
                           oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                 PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             relates to 2'-O-aminoethylthioethyl-modified ribosyl
                                                                                                                                                                                                                                                                                                Cook PD;
                                                                                                                                                                                                                                                                                                                                                             98US-00130566.
99US-00370625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide #25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; 26pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.8;
Pred. No. 1.
                             This sequence represents a modified the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .7e+03;
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Query Match Best Local Similarity

1.6%;

Score 15.8; DB 1; Pred. No. 1.7e+03;

Length 19;

ä

Sequence 19

BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

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ADM42087
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                                                                                                                                                                                                                                                                   nanotubes; (2) physically modifying (M2) a nanotube; (3) linking (M3) nanotubes; (4) a several linked nanotubes (II) produced by (M3); (5) nanotubes; (4) a several linked nanotubes (II) produced by (M3); (5) nanotubes; (4) a several linked nanotubes (II) produced by (M3); (5) nanotubes; (4) nanotubes to specific targets; (6) a nucleic acid sensor (III) comprising (I), where the base sequence of the attached nucleic acid molecule is substantially complementary to all or a portion of the base sequence of the nucleic acid molecules being detected; (7) a DNA array consisting of an array of groups of one or more nanotubes, each group having one or more nucleic acid molecules of the same base sequence attached to each nanotubes in the group, and where the base sequence of the nucleic acid molecules, attached to the nanotubes in one group differs from those in other groups so that a number of different target DNA molecules may be detected; (8) an actuator comprising (I) and a membrane support to which the DNA-modified nanotubes are attached; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nanotube; nucleic acid sensor; DNA array; conductor; nanoparticle; biosensor; detection; screening; bacterial; viral; pharmaceutical; agricultural; food control; hygiene; environmental; forensic; nano-scale conductor; semiconductor; nano-electronic; prostatic ne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carbon nanotube attached with one or more nucleic acid molecules, as biosensor for screening presence of bacterial or viral nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JUN-2004
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useful in clinical application for screening presence of bacterial overland nucleic acid, in pharmaceutical applications, agricultural applications, food control, hygiene and environmental monitoring and forensic applications. (II) is useful as a nano-scale conductor or semiconductor, more specifically as a component in nano-electronic applications, as a replacement for damaged nerves in prostatic
                                                                                                                          (9) a conductor (IV) comprising (I). (I) is useful in coating one or manotubes with manoparticles, which involves exposing (I) to nanoparticles comprising several attached complementary nucleic acid molecules, where the nanoparticles hybridise to the nucleic acid molecules on the surface of the nanotube(s) as well as self-annealing other nanoparticles, forming one or more coated nanotubes. (I) can be used as a biosensor for detecting complementary nucleic acid strands,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a nanotube (I) attached with one or more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-AUG-2002; 2002AU-00951274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-AUG-2003; 2003WO-AU001118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004020450-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bio-electronic interface; transistor; gated device; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Exemplary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADM42087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CSIR ) COMMONWEALTH SCI & IND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acid molecule(s). Also described: (1) chemically modifying e: (2) physically modifying (M2) a nanotube; (3) linking (M3)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTATTTATTTTTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 91; 147pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostatic nerve;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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Query Match Best Local S Matches 17

1 Similarity
17; Conserv

Conservative

0;

Mismatches

Indels

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Gaps

0

1.6%;

Score 15.8; Pred. No. 1

1.7e+03;

Length 19;

Sequence 19

BP; 0

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0 Other; DB 1;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present
example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   applications,
                   The invention relates to nucleoside compounds. The nucleoside compounds are useful as antisense compounds in diagnostics, therapeutics, prophylaxis, and as research reagents and kits, and to prevent or delay infection, inflammation or tumour formation. The compounds have enhanced binding affinity properties. The present sequence represents a 2'-O-MOE-thio modified oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; antisense; infection; enhanced binding affinity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADM47150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      devices. (II)
                                                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2'-0-MOE-2-thio modified oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADM47150 standard; DNA; 19 BP
                                                                                                     Example
                                                                                                                            delay e.g. infection,
                                                                                                                               New nucleoside compounds useful as antisense compounds to prevent delay e.g. infection, inflammation or tumor formation.
                                                                                                                                                                                      Manoharan M,
                                                                                                                                                                                                                                                                                   16-AUG-2002; 2002US-00222588
                                                                                                                                                                                                                                                                                                          19-FEB-2004.
                                                                                                                                                                                                                                                                                                                                 US2004033973-A1
                                                                                                                                                                WPI; 2004-256363/24
                                                                                                                                                                                                                         (MANO/) MANOHARAN M. (PRAK/) PRAKASH T P.
                                                                                                                                                                                                                                                            16-AUG-2002; 2002US-00222588
                                                                                                                                                                                                             (RAJE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       427 TITTTATTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tions, or as the bio-electronic interface in bio-electronic . (II) can also be used as a transistor or gated device. The sequence represents an oligonucleotide which is used in an from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                              RAJEEV K G
                                                                                                        211; SEQ ID NO 17; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                      Prakash
                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers 16. .19
                                                                                                                                                                                                                                                                                                                                               /*tag= a
/mod_base= OTHER
/mod_base= OTHER
/note= "OTHER = 2'-O-[2-(methoxy-)ethyl]-2-thio-5-
methyluridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; 0 C; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.6%;
                                                                                                                                                                                      TP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation; tumour;
                                                                                                                                                                                       Rajeev
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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                                    represents a 2'-O-MOE-2
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AD058963
$8$E
                                             AD058942
                                                       RESULT 1816
                                                                                                                                       Query Match
Best Local S
Matches 17
           AD058942
                                                                                                                                                                                                                                                                                                                                         Enhancing renal uptake of an oligomeric compound in the diagnostic and therapeutic applications involves incorporating at least one modified ribosyl nucleoside into the oligomeric compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide #4 used in animal studies
                                                                                                                                                                                     Sequence 19
                                                                                                                                                                                                          reagents; and for treating infection caused by organisms (e.g. bacter yeast, protozoa and algae) in plants and higher animals. The present sequence is an oligonucleocide used in animal studies. This sequence used to illustrate the method of the invention.
                                                                                                                                                                                                                                                        The invention relates to 2'-O-modified ribosyl nucleosides and methods enhancing renal uptake of an oligomeric compound. The method is useful for enhancing renal uptake of an oligomeric compound. The sequences of the invention are useful in diagnostics, therapeutics and as research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AD058963
                                  ADO58942 standard;
                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-201317/19.
                                                                                                                                                                                                                                                                                                                                                                                                                Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-AUG-1998;
06-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-FEB-2003; 2003US-00359328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004009938-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Renal uptake enhancement; therapy; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO58963 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                      (MANO/) MANOHARAN M. (COOK/) COOK P D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2004
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                                                                                                                 427
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                                                                                                                                        l Similarity
17; Conserv
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                                                                                                                 TTTTTATTTTTTTT 445
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                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                               Cook PD;
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99US-00370625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Modified with 2'-0-[2-(2-N,N-dimethylaminoethyl)
oxyethyl]-5-methyl uridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                     A; 0 C; 0
                                 DNA;
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                                                                                                                                                1.6%;
89.5%;
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                                                                                                                                                                                     G; 19 T; 0 U; 0 Other;
                                                                                                                                       Score 15.8; I
Pred. No. 1.7e
0; Mismatches
                                                                                            19
                                                                                                                                                  .7e+03;
                                                                                                                                                              DB 1; Length 19;
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RESULT 1817
ADO47036
ID ADO4703
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Best Local
                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to 2'-O-modified ribosyl nucleosides and methods of enhancing renal uptake of an oligomeric compound. The method is useful for enhancing renal uptake of an oligomeric compound. The sequences of the invention are useful in diagnostics, therapeutics and as research reagents; and for treating infection caused by organisms (e.g. bacteria, yeast, protozoa and algae) in plants and higher animals. The present sequence is an oligomucleotide used to illustrate enzymatic degradation of 2'-O-modified oligomers. This sequence is used to illustrate the
Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enhancing renal uptake of an oligomeric compound in the diagnostic and therapeutic applications involves incorporating at least one modified ribosyl nucleoside into the oligomeric compound.
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                                                                                                                                                                  ADO47036 standard;
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06-AUG-1999;
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                                                                                Human oligonucleotide #2402.
                                                                                                                                      ADO47036;
                                                                                                                                                                                                                                                               427
                                                                                                                                                                                                                                                                                          17;
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f
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COOK P.D.
                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                      TTTTTATTTTATTTTTTTT
                                                                                                                                                                                                                                   TTTTTTTTTTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                            the invention.
                                                                                                                                                                                                                                                                                          Conservative
                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               enhancement;
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99US-00370625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "Optionally 2'-O-modified with propyl,
methoxyethyl or DMAEOS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                    1.6%;
                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            therapy; infection; ss
                                                                                                                                                                  ВÞ
                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                445
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                                                                                                                                                                                                                                                                                                     Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                       1.7e+03
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                                                                                                                                                                                                                                                                                                                  Length 19;
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                                                                                                                                                                                                                                                                                          Gaps
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fibrosis; CF;

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The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region cowith 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL) 4 receptor, interleukin (IL) 5' receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention CC also relates to a method of screening a candidate compound that binds to come or more nucleic acid target(s) or expressed product(s), for the CC oligonucleotides are useful for reducing or inhibiting expression of a CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, tryptase a, CC useful for preventing or treating a respiratory or lung disease. The CC useful for preventing or treating a respiratory or lung disease a receptor(s), and/or sthma and/or lung allergies associated with hyper-responsiveness to inflammation or an inflammatory disease. The respiratory or lung disease (CP), chronic obstructive pulmonary disease (COPD), callergic rhinitis, acute respiratory distress syndrome, pulmonary conchecens triction. This sequence represents an oligonucleotide of the pronchoconstriction. This sequence represents an oligonucleotide of the
                                                                 Query Match
Best Local S
Matches 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Page 163; 174pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-293804/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shahabuddin
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23-APR-2002;
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                                                                                                                                                               Sequence
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                    885
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H
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                                                                                        Similarity
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CACCACGCCCGGCTTATTT
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in S, Lu H,
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2002WO-US013143.
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ong H;
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                                                                                                                                                               G; 4
                      903
                                                                                             Score 15.8;
Pred. No. 1
                                                                      Mismatches
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                                                                                                               Length 19;
                                                                      Indels
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                                                                    Gaps
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RESULT 1818
           The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target CC chosen from a gene encoding interleukin (II)-4 receptor, interleukin (II)-5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention CC also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the CC one or more nucleic acid target(s) or expressed product(s), for the CC prevention and/or treatment of a respiratory or lung disease. The CC oligonucleotides are useful for reducing or inhibiting expression of a CC gene or mRNA encoding interleukin-f reducing or interleukin-f receptor, CC CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are cuseful for preventing or treating a respiratory or lung disease. The complete composition A CC and/or increased levels of, adenosine and/or levels of adenosine A CC receptor(s), and/or asthma and/or lung allergies associated with cc inflammation or an inflammatory disease. The respiratory or lung disease in flammation, allergy, asthma, impeded respiration, cc stick fibrosis (CP), chronic obstructive pulmonary of light or language of allergy and constructive pulmonary or language of allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; acute respiratory distress syndrome; pulmonary hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADO44643 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel single or multiple target oligonucleotide anti-sense to e.g. coinitiation codon, intron of respiratory disease-relevant gene e.g. Coronavers, MCP4, useful for prophylaxis or treating respiratory disease
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                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2;
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23-APR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W.
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MILLER S.
SHAHABUDDIN
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in S, Lu H,
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2002WO-US013143
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Cong H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miller
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CCR1, e.9

hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the

invention.

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RESULT 1819
AD047037
ID 47037
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; 88; interleukin-4 receptor; II-4; interleukin-5 receptor; II-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; allergy; inflammation; respiration; cystic fibrosis; CF chronic obstructive pulmonary disease; CODD; allergic rhinitis; cacute respiratory distress syndrome; pulmonary hypertension;
  The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (I-5 receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
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                                                                                                                                                                                                                                                                    Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
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23-APR-2002; 2002WO-US013143
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                                                                                                                                                                                            Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NYCE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SHAH/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AGUI/)
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MILLER S.
SHAHABUDDIN S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NYCE J W.
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TANG L.
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                                                                                                                                                                                         Page 163; 174pp; English.
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Pred. No. 1
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                                                                                                                                                                                                                                                                          respiratory disease e.g.
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RESULT 1820
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Best Local S
Matches 17
                                                                                                                                                                                                                                  Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide or
         Nyce JW, Sandrasagra A, Ti
Shahabuddin S, Lu H, Cong
                                                                                    (NYCE/)
(SAND/)
(TANG/)
                                                                                                                             23-APR-2002; 2002WO-US013135.
23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                    Human oligonucleotide #8.
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                                                                                                                                                                                                                                                                                                                                                                                             ADO44642 standard;
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                                                                                                                                                                                                                Homo sapiens
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                                                                             AGUI/)
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                                     MILLER S.
SHAHABUDDIN
LU H.
CONG H.
                                                                                     SANDRASAGRA
TANG L.
                                                                                                        NYCE J W.
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Pred. No. 1.
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                   Aguilar D,
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                     Miller
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WPI; 2004-293804/27

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RESULT 1821
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the CC prevention and/or treatment of a respiratory or lung disease. The CC oligonuclectides are useful for reducing or inhibiting expression of a CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, CC CTR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonuclectides are CC respiratory or lung disease is associated with hyper-responsiveness to CC and/or increased levels of, adenosine and/or levels of adenosine A CC receptor(s), and/or asthma and/or lung allergies associated with CC inflammation or an inflammatory disease. The respiratory or lung disease is chosen from airway inflammation, allergy, asthma, impeded respiration, CC setic fibrosis (CP), chronic obstructive pulmonary disease (COPD), callergic rhinitis, acute respiratory distress syndrome, pulmonary control of the control of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        codon, coding region, 5' or 3' intron-exon junction, intron or with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid
                                                                                                                                                                                                                                                                                                                                             breast cancer; cytostatic; gene therapy; human; platelet glycoprotein GP6; GPIV; GPVI; chromosome 19q13.4; ss; PCR; primer; SNP; single nucleotide polymorphism.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bronchoconstriction. This sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates
                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Extend primer
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Roth RB,
                                                                                                                25-NOV-2002;
                                                                                                                                                              25-NOV-2003; 2003WO-US037966.
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17; Conserv
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Nelson MR,
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                                                                                       2002US-0429136P
2003US-0490234P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        10 used to genotype human glycoprotein VI polymorphism
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89.5%;
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Braun
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Kammerer
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SM,
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Reneland
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RESULT 1822
ADO59136
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                     11-JAN-2002;
12-MAR-2002;
10-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV;GPVI) DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 identifying a subject at risk of breast cancer by or absence of one or more nucleotide polymorphic or diagnosing, preventing and/or treating breast cancer by
The invention relates to an isolated nucleic acid molecule (1), comprising a nucleic acid sequence chosen from 75 Nicotiana-derived conforme P450 enzyme fragment sequences. (I) is useful for producing a transgenic tobacco plant, which involves operably linking (I) with a promoter functional in the plant to create a plant transformation vector, and transforming the plant with the plant transformation vector,
                                                                                                                                                                       WPI;
                                                                                                                                                                                                 Xu D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel method for identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; Page 82; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-441082/41.
                                                                                                                    transgenic
                                                                                                                               An isolated nucleic
Nicotiana derived cy
                                                                                                                                                                                                                                                                                                         12-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                               US2004117869-A1
                                                                                                                                                                                                                                                                                                                                                                                          Nicotiana
                                                                                                                                                                                                                                                                                                                                                                                                                 ss; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Tobacco cytochrome P450 PCR primer #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO59136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO59136 standard; DNA;
                                                                                            Disclosure; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                     17-JUN-2004.
                                                                                                                                                                                                                            (USSM-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   870
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17; Conserv
                                                                                                                                                                                                                            SD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                    derived cytochrome plants.
                                                                                                                                                                                                                             SMOKELESS TOBACCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP;
                                                                                                                                                                                                                                                   ; 2002US-0347444P.
; 2002US-0363684P.
; 2003US-00340861.
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                                                                                                                                                                                                                                                                                                           2003US-00387346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                   cytochrome
                                                                                                                                              acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.6%;
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                                                                                            154;
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                                                                                                                                  rome P450 e
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                                                                                            82pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G; 4 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                    P450; transgenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      888
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                            English.
                                                                                                                                   enzyme
                                                                                                                                    comprising nucleic acid
enzyme fragments, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                    tobacco;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  variations,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     detecting the presence variations, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a subject at risk
                                                                                                                                   sequence of for producing
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RESULT 1823
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XX Human;
XX Human;
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CC Compris
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Best Local S
Matches 26
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                regenerating a plant from the selected plant cell. The nucleic acid molecule is in an antisense orientation, sense orientation or is in a RNA interference orientation. The present sequence represents a PCR primer used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
                                                                                                                                   Sequence 60
                                                                                                                                                                                 comprises identifying non-protein-encoding nucleotide sequences within an mRNA transcript or a DNA sequence encoding same in the nucleome. The methods are useful for identifying an eRNA or DNA for modifying a genetic network in cell to alter the cells phenotype. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide sequence enquiry #60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 0
                                                                                                                                                                                                                                                    The present invention relates to identifying an eRNA or a DNA sequence comprising an eRNA-encoding sequence in the nucleome of a eukaryotic c
                                                                                                                                                                                                                                                                                                                                                       Identifying an eRNA or a DNA sequence comprising an eRNA-encoding sequence in the nucleome of a eukaryotic cell, comprising identifying protein-encoding nucleotide sequences within an mRNA transcript or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mattick J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-SEP-2002; 2002WO-AU001286.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADI20573 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the invention.
                                                                                                                                                                    represents
                                                                                                                                                                                                                                                                                                         Example 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-SEP-2001; 2001US-0324127P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               427
43
                                                                   26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ds; eRNA
                                                                                     Similarity
                               TGAGACAGAGTCTCAACTCTGTCACCCAGGCTGGAGTGCAGTG 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTTTTTTTTTTTTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTTATTTTATTTTTTT 445
TGAGCCAAGATCGCACCACTGCACTCCAGCCTGGGTGACAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a plant cell transformed with the transformation vector,
                                                                                                                                                                   human oligonucleotide sequence enquiry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gagen M,
                                                                                                                                   BP; 8 A; 22 C; 16 G; 14 T; 0 U; 0 Other;
                                                                   Conservative
                                                                                                                                                                                                                                                                                                        SEQ ID NO 63; 137pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                              1.6%;
60.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
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89.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stanley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                 Score 15.8; DI
Pred. No. 1.8e-
0; Mismatches
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                                                                 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.8;
No. 1
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                                                                                   .8e+03;
                                                                                               DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                 17;
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                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                 Indels
                                                                                                   60
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                                                                 0
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                                                                 Gaps
                                                                                                                                                                                                                                                  cell,
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RESULT 1824

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AC ADO5

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                                                                                                                                                                                                                                                                                                    RESULT 1825
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a method of identifying a subject at risk of melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence
                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        melanoma associated polymorphic varia presynaptic cytomatrix protein; PCLO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human presynaptic cytomatrix protein, PCLO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AD056744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADO56744 standard; DNA; 18 BP
Single nucleotide polymorphism; SNP; single nucleotide primer extension;
                                                                                                                         14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            compositions
represents a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 6; Page 105; 295pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-2002; 2002US-0424475P.
23-JUL-2003; 2003US-0489703P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-NOV-2003; 2003WO-US035879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAY-2004
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                                                                                                                                                                                    AAH38408;
                                                                                                                                                                                                                                         AAH38408 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-411721/38.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      686 TCTGCCTCCCGGGTTCAA 703
                                                       SNP flanking oligonucleotide SEQ ID 1204.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          n 1.6%;
Similarity 88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human presynaptic
                                                                                                                      (first entry)
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                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; melanoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytomatrix protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              variation;
PCLO; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kammerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proximal SNP probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present sequence PCLO, proximal p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probe.
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RESULT 1826
AAX10256/c
ID AAX1025
XX AAX1025
AC AAX1025
XX
DT 24-MAR-
XX
DE Human b
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking controlled the sites of single nucleotide polymorphisms SNPs. The present invention controlled that for determining the presence of a SNP, using the property of the invention. The PCR primers are used to amplify a conjugonucleotides of the invention. The PCR primers are used to amplify a conjugonucleotides are useful for genotyping a nucleic acid sample by conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides are useful for determining the presence, absence or conjugonucleotides and pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. conjugonucleotides and pathological phenotypic traits include diseases e.g. conjugonucleotides and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial conjugates and including, rheumatoid arthritis, multiple scherosis, recording the site of a single nucleotide polymorphism of human conferming and paternity analysis. The present sequence represents a fragment of human conferming the site of a single nucleotide polymorphism.
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; lesch Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemi polycystic kidney dieease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 56; 83pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               absence or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-290930/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200129262-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                              Human biallelic polymorphic marker
                                                                                           24-MAR-1999
                                                                                                                                                                                                           AAX10256
                                                                                                                                                  AAX10256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              1032
                                                                                                                                                                                                                                                                                                                                                        8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51
                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                           AGCTGGGATTACGGGCACCTGCCACCACCCCCGCTAATT 1071
                                                                                                                                                                                                                                                                                                                                                     AGCCGGGCGTGGCAGGTGCCTGTAATCCCAGCTACTY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₿P;
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                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; 11 C;
                                                                                                                                                                                                           DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.6%;
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                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.6; DB Pred. No. 2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                    downstream
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           familial hypercholesterolaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                 primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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treatment;
                                                      autoimmune
                                                                   polymorphism; biallelic; human; detection; phenotypic typing; cl
Synthetic
                       phenotypic typing; characteristic; infection; here disease; cancer; inflammation; drug; therapy; mediamarker; primer; 85.
                                                            medicament;
                                                                             hereditary;
                                                                                              disease,
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sapiens.

WO9820165-A2

14-MAY-1998

05-NOV-1997; 97WO-US020313

06-NOV-1996;

96US-0030455P

(WHED) WHITEHEAD INST BIOMEDICAL

Lander ES, Wang á

New isolated nucleic acid segments from the human determining polymorphic forms for use in e.g. for testing or phenotypic typing for disease. man genome forensics, paternity used for

Claim 16; Page 220; 310pp; English.

AAX09121-X10268 are allele-specific oligonucleotide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary hypercytosis, yon Willebrand's disease, tuberous solerosis, hereditary spherocytosis, yon Willebrand's disease, tuberous solerosis, hereditary haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases

Sequence 17 BP; 3 ð 3 C; 8 G; 3 T; 0 U; 0 Other;

Matches Query Match Best Local 16; Similarity Conservative 1.6%; 0 Score 15.4; Pred. No. 1 Mismatches 1.6e+03 В 1; Length 17; Indels 0 Gaps

0

밁 á 673 GCTCACTGCAACCTCTG 17 GCTCACTGCAACCTCCG 689

RESULT 1827 AAA22858 AAA22858

S

standard; RNA; 17

*********** 19-JUN-2000 (first entry)

Integrin subunit beta 3 substrate sequence SEQ ID NO:6084.

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angioge: integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribo; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabeti. ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; dermatological; RNA cleavage; cancer; diabetic retinopathy; arti TIE-2; angiogenesis; antidiabetic ribozyme;

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ARESULT 1828
AAA22737
ID AAA2273
XX AAA2273
AC AAA2273
XX
DT 19-JUN-
XX
DE Integri
XX
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                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17655 to AAA18355 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19234 represent ribozyme sequences for Tie-2, and AAA19086 to AAA19086 co AAA19232 represent their corresponding target sequences; CC AAA19232 to AAA20361 and AAA21501 to AAA2155 represent ribozyme sequences; CC AAA19232 to AAA22168 represent their corresponding target sequences; CC AAA19232 to AAA22168 represent their corresponding target sequences; CC AAA21689 to AAA22168 represent their corresponding target sequences; CC AAA21689 to AAA22163 and AAA23363 to AAA23132 represent ribozymes of the invention are used for modulating target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are CC especially used to treat cancer, diabetic retinopathy, age related corresponding target sequences; related corresponding target sequences; and other syndrome, of theserous solerowise, pot-wine stains, Sturge Weber correspondences and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Webber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                       Integrin subunit beta 3 substrate sequence SEQ ID NO:5963
                                                                19-JUN-2000
                                                                                                    AAA22737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
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                                                                                                                                             AAA22737 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP;
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                                                                                                                                                                                                                                                                                        842 GCCTGCCTCGCCTCCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54; Page 246; 305pp; English
                                                                                                                                                                                                                                                                                                                                1 Similarity
13; Conserv
                                                                                                                                                                                                                                                   ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                      subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                 eccueccuueeccuccc 17
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                                                                                                                                                                                                                                                                                                                                  Conservative
                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                 0 A;
                                                                                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                 9 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jarvis T, Coeshott C,
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                                                                                                                                                                                                                                                                                                                                                   Score 15.4; DB 1; Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                  Indels
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RESULT 1829
AAA22829
ID AAA2282
XX
AC AAA2282

AAA22829 standard; RNA; 17

AAA22829

닭 S

Matches

14;

Conservative

2;

Mismatches

Indels

<u>,,</u>

Gaps

0

734 CTGGGACTACAGGCGCC 750

CUGGGAUUACAGGCGCC 17

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CC hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit beta 3 cross and analysis are an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16755 to AAA17161 to AAA1762 represent ribozyme sequences for ARNY, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cand AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19223 to AAA2361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and CC Sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and CC AAA21698 to AAA22475 and AAA23233 to AAA23342 represent ribozyme sequences; CC AAA21689 to AAA22475 and AAA23233 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to AAA23422 represent their corresponding target sequences corresponding target sequences. The ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to AAA23422 represent their corresponding target sequence of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, corresponding target sequences. The ribozyme sequence captured to treat cancer, diabetic retinopathy, age related corresponding target sequences. They are sequences of the invention (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, cand other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit beta-3 crimerial syndrome, of the syndrome, of the syndrome, cand arthritis, as well as necessarial subunit beta-3 crimerial syndrome, cand arthritis, as well as necessarial syndrome, stains, Sturge Weber captured to the levels of ARNT, Tie-2, integrin subunit beta-3
  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA Cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Suurge Weber syndrome;
                                                                                  Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 54; Page 239; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC
Local Similarity 82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0079678P
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  Pred. No.
                         Score 15.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coeshott C,
1.6e+03
                               DB 1;
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                         Length 17;
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19-JUN-2000

(first

Integrin subunit beta 3 substrate sequence

SEQ ID NO: 6055

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Crieaving activity, which specifically cleave RNA encoded by an aryl collegation nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, cand AAA17168 to AAA17563 and AAA17622 represent tribozyme sequences for ARNT, cand AAA19154 represent ribozyme sequences; AAA17685 to AAA19855 and AAA19087 to corresponding target sequences; AAA17685 to AAA19855 and AAA19087 to cand AAA19155 to AAA19222 represent their corresponding target sequences; and aAA19155 and AAA19086 to AAA19123 to AAA123361 and AAA12350 to AAA12335 and AAA19086 cand AAA19123 to AAA21501 and AAA21501 to AAA21555 represent ribozyme sequences; aAA19223 to AAA21561 and AAA21501 to AAA21555 represent ribozyme cand cand active to AAA21561 and AAA21561 to AAA21342 represent ribozyme sequences; aAA12156 to AAA2168 represent their corresponding target sequences; cand aAA21591 to AAA21591 to AAA21592 represent ribozyme sequence for integrin subunit beta 3, and AAA2342 represent ribozyme of the invention are used for modulating target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or capture in subunit beta-3, integrin subunit alpha-6, or Tie-2. They are sequenced and other syndrome, (ARMD), inflammation, and arthritis, as well as meovascular degeneration (ARMD), inflammation, and arthritis, as well as an election of the syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARMT, Tie-2, integrin subunit beta-3.
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                                                                                                Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; anglogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; anglogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9950403-A2
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                                                                                                                                                          Sequence 17
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                                        1002 AAGCGATTCTCCTGTCT 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA encoding an angiogenic
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11; Conser
                                                                                                                                                                                                  subunit alpha-6, or integrin
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                                                                                                  64.7%;
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                                                                                                    Pred. No. 1.
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                                                                                                                                                              0 T; 5 U; 0 Other
                                                                                 Mismatches
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                                                                                                                                                                                                       subunit beta-3
                                                                                                    1.6e+03;
                                                                                                                       DB 1;
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                                                                                                                     Length 17;
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RESULT 1830
AAA22832
CC cleaving activity, which specifically cleave RNA encoded by an aryl cleave RNA encoded by an aryl cleave RNA encoded by an aryl college and integrin alpha 6 subunit gene, an integrin subunit beta 3 cc gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cc AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cc AAA19123 to AAA20361 and AAA21501 to AAA21835 represent ribozyme sequences; CC AAA191250 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21683 represent their corresponding target sequences; CC AAA21689 to AAA21683 represent their AAA2342 represent ribozyme sequence cfor integrin subunit beta 3, and AAA22476 to AAA21500 and CC stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta 3, integrin subunit talpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related cespecially subunit beta-3, integrin subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted as a subunit alpha-6, or Tie-2. They are consisted to the subunit alpha-6, or integrin subunit alpha-6, or Tie-2. They are consisted to the consisted to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, contends the cou
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Query Match Best Local S Matches 13

Similarity

1.6%; 7 C; 4

Score 15.4; DB 1; Pred. No. 1.6e+03;

Length 17;

Indels

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Gaps

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13;

Conservative

Sequence 17

BP; 3

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RESULT 1831
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                                                              CC cleaving activity, which specifically cleave RNA encoded by an aryl control of the control of
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
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                                               subunit alpha-6,
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RESULT 1832
AAA22847
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       Creaving activity, which specifically cleave RNA encoded by an aryl Creaving activity, which specifically cleave RNA encoded by an aryl Creaving activity, which specifically cleave RNA encoded by an aryl Creaving and process of the process of the
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Best Local Similarity
Matches 12; Conserv
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Pred. No. 1.
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       CC The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17563 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18985 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18986 to AAA19086 CC CAAA19155 to AAA19222 represent their corresponding target sequences; CC CAAA19223 to AAA20361 and AAA21501 to AAA21562 to AAA21500 and CC CAA21596 to AAA21688 represent their corresponding target sequences; CC CAA21689 to AAA21688 represent their corresponding target sequences; CC CAA21690 to AAA22475 and AAA23263 to AAA23343 to CC CAA23422 represent their corresponding target sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to CC CAA23422 represent their corresponding target sequences. The ribozymes of CC CAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or carefullity of an modulating the synthesis, expression and/or carefullity of an modulating the synthesis, expression and/or carefullity of an modulating the synthesis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; aryl hydrocarbon nuclear transport; ARWN; TIE-2; angiogeneeis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARWD;
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the invention as
stability of an
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mRNA encoding angiogenic factor,
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Pred. No. 1.
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Best Local &
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
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The present invention describes enzymatic nucleic acid molecules with cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta gene, an integrin alpha 6 subunit gene, or a Tie-2 gene AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARN and AAA17168 to AAA17663 to AAA1963 and AAA18087 to AAA1963 and AAA1836 to AAA2150 and AAA1963 to AAA2166 to AAA2150 to AAA2150 and AAA2150 to AAA2150 and AAA2150 to AAA2150 and AAA2150 to AAA2150 and AAA2150 to AAA2160 to AAA2150 to AAA2150 and AAA2150 to AAA2150 and AAA2150 to AAA2150 and AAA2150 to A

to AAA21688

sequences;

sequences; to AAA19086

for ARNT,

beta 3 RNA Claim

54; Page 245; 305pp; English.

Novel ribozymes for of an mRNA encoding

modulating the synthesis, an angiogenic factorial

expression and/or stability

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RESULT 1835
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Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritle; antipsoriatic; RND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                The present invention describes enzymatic nucleic acid molecules with cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for AF and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
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                                                                                                                                                             Claim
                                                                                                                                                                                                     of an
                                                                                                                                                                                                                        Novel
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                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9950403-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
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                                                                                                                                                           Page 239;
                                                                                                                                                                                                                                                                                                       Roberts E,
                                                                                                                                                                                                 encoding
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                                                                                                                                                                                                                     expression and/or stability
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RESULT 1836
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; degree related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu
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7; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           substrate sequence SEQ ID NO:5960.
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl

54; Page 239; 305pp; English.

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RESULT 1837
AAA22826
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammacory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
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ribozymes for modulating the synthesis, mRNA encoding an angiogenic factors.
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                                                                                                                                                                                  Roberts
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Pred. No. 1.
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                                                                                                                                                                                         Coeshott
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                                                                                                                                                                                     'n
                                     expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
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Pavco PA,

Roberts E,

Jarvis

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Coeshott

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Mcswiggen JA;

07-OCT-1999.

Homo sapiens

Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome;

24-MAR-1999;

27-MAR-1998;

98US-0079678P 99WO-US006507

(RIBO-) RIBOZYME PHARM INC.

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AAA22859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1838
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA23422 represent their corresponding target sequences. The ribozymes the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                              Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammactory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pbt-wine stain; Sturge Weber syndrome; tuberous sclerosis; pbt-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 54; Page 244; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA22859 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Integrin subunit beta 3 substrate sequence SEQ ID NO:6085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUN-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0 Other;
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RESULT 1839
AAA22760
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cc hydrocarbon nuclear transporter (ARNT) gene, an integrin submit beta 3 compared and integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17563 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17623 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences; AAA17625 to AAA19386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19232 to AAA2361 and AAA21595 represent ribozyme corresponding target sequences; AAA19223 to AAA2361 and AAA21595 represent ribozyme sequences; AAA19223 to AAA2361 and AAA21595 represent ribozyme sequences; ChaA21689 to AAA2363 and AAA21691 to AAA2362 to AAA21680 and AAA2363 to AAA23342 represent their corresponding target sequences; ChaA21689 to AAA22475 and AAA23342 and AAA23342 represent ribozyme sequence; Che integrin subunit beta 3, and AAA22476 to AAA23342 represent ribozymes of the invention are used for modulating the synthesis, expression and/or crace integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related concervascular glaucoma, myopic degeneration, and arthritis, as well as negotionem, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, cand other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                             Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antiporiatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                24-MAR-1999;
                                                      07-OCT-1999.
                                                                                                                                                                                          myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                           19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA22760 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vel ribozymes for an mRNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54; Page 247; 305pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                  subunit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP;
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                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                99WO-US006507.
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                                                                                                                                                                                                                                                                                                                                                                    beta 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modulating the synthesis, expression and/or stability an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                  substrate sequence SEQ ID NO:5986.
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gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17567 and AAA17561 to AAA17622 represent ribozyme sequences for ANT, and AAA17168 to AAA17563 to AAA17623 represent ribozyme sequences for ANT, and AAA17168 to AAA17563 to AAA17634 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19233 to AAA21361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; AAA21596 to AAA21689 to AAA2375 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to
                                                                    AA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes enzymatic nucleic acid molecules with RI cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARRY) gene, an integrin subunit beta 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 54; Page 240; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ribozymes for modulating the synthesis, {\tt mRNA} encoding an angiogenic factors.
                                                 subunit alpha-6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jarvis T,
                                                 or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecules with RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JA;
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S Matches Query Match Best Local Similarity 395 CTGGGATTACAGGCGTG 411 13; Conservative 1.6%; u •• Score 15.4; DB 1; Pred. No. 1.6e+03; Mismatches DB 1; Length 17; 0; Gaps

0

Sequence 17

BP; 4 A; 3 C; 7 G; 0 T; 3 U; 0 Other;

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1 CUGGGAAUACAGGCGUG
17
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AAA22834 standard; AAA22834; Integrin subunit beta 3 substrate sequence SEQ ID NO:6060 19-JUN-2000 (first entry) RNA; 17 ВP

AAA2283 AAA2283 XX AAA2283 XX AAA2283 XX AAA2283 XX Integri XX Integri XX Himan DT 19-JUN-XX Himan EW Himan EW Integri EW Ophthall Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss syndrome; ss

Homo sapiens

WO9950403-A2

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RESULT 1841
AAA22723
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-OCT-1999.
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50
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                                                                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                  AAA22723;
                                                                                                                                                    AAA22723 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                  syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                          Integrin subunit beta 3 substrate sequence SEQ ID NO:5949
                                                                                                              19-JUN-2000
                                                                                                                                                                                                                                                                                                        integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                          1033 GCTGGGATTACGGGCAC 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54; Page 245; 305pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ribozymes for modulating the synthesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                              13;
                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                        GCUGGGAUUACAGGCAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roberts E,
                                                                                                                                                                                                                                                                                      BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention
                                                                                                                                                                                                                                             Conservative
                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0079678P
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                                                                                                                                                                                                                                                        1.6%;
                                                                                                                                                                                                                                                                                      4 C; 6 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       describes enzymatic nucleic acid molecules with RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                      ₽₽
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T
                                                                                                                                                                                                                                              Score 15.4; D
Pred. No. 1.6e
3; Mismatches
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                                                                                                                                                                                                                                                         .6e+03;
                                                                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen JA;
                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                               0;
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AAA22966/ ID AAA22 XX AAA2: AC AAA2: DT 19-JT XX Inte XX Inte XX Humas KW inte

19-JUN-2000 AAA22966;

(first

entry)

AAA22966 standard; RNA; 17

В₽

hammerhead ribozyme; angiogenic

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

cytostatic;

Integrin subunit beta 3 substrate sequence

SEQ ID NO:6192.

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CC hydrocarbon nuclear transporter (ARNI) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA17675 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17661 to AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19086 to AAA191222 represent their corresponding target sequences; CC AAA19233 to AAA191222 represent their corresponding target sequences; CC AAA19233 to AAA21688 represent their corresponding target sequences; CC AAA21696 to AAA21688 represent their corresponding target sequences; CC AAA21696 to AAA21688 represent their corresponding target sequences; CC AAA21699 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or ce specially used to treat cancer, diabetic retinopathy, age related comeouslating sequences and concer, diabetic retinopathy, age related comeouslating sequences, Sturge Weber concers of the process and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or Tie-2 and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and diseases related to the levels of ARNT, Tie-2, integrin subunit sequences and sequences 
RESULT 1842
                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 54; Page 238; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel ribozymes for modulating the synthesis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes enzymatic nucleic acid molecules with RNI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 integrin subunit alpha-6,
                                                                                                                                                                                                                                                                                           госат
                                                                                                                                                                                  678 CTGCAACCTCTGCCTCC 694
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                                                                                                                                                                                                                                                        l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activity, which specifically cleave RNA encoded by an aryl
                                                                                                                cuccaacuucucccucc 17
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                                                                                                                                                                                                                                                                                                                                                                                                               BP;
                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                           1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or integrin subunit beta-3
                                                                                                                                                                                                                                                            4.
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
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ID AAAZ5179
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                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17561 to AAA17562 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17622 represent ribozyme sequences for ARNT, CC corresponding target sequences; AAA17685 to AAA1385 and AAA19087 to CC CAAA19154 represent ribozyme sequences for Tie-2, and AAA19386 to AAA19155 to AAA19222 represent their corresponding target sequences; AAA19232 to AAA19235 to AAA19355 and AAA19086 CC AAA19323 to AAA21501 to AAA21505 represent ribozyme sequences; AAA19223 to AAA2163 and AAA21501 to AAA21555 represent ribozyme sequences; AAA19223 to AAA22361 and AAA21501 to AAA2155 represent ribozyme sequences; AAA12823 represent ribozyme sequences; AAA12892 to AAA22363 and AAA21501 to AAA22362 represent ribozyme sequences; AAA12892 to AAA21688 represent their corresponding target sequences; AAA19323 to AAA21689 to AAA22363 and AAA2365 to AAA23432 represent ribozyme sequence for integrin subunit beta 3, and AAA2346 to AAA2342 represent ribozymes of the invention are used for modulating target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, cc especially used to treat cancer, diabetic retinopathy, age related corresponding target sequences; related corresponding and other syndrome, weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit beta-3 critegrin subunit beta-3 criteg
                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                    Best
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                      19-JUL-2000
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dermatological;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                 AAA25179;
                                                                                                          AAA25179
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ribozymes for modulating the synthesis, expression and/or stability {\tt mRNA} encoding an angiogenic factors.
                                                                                                                                                                                                                       17
                                                                                                                                                                                                                                                                                                           l Similarity
16; Conserv
                                                                                                                                                                                                                                                  CTGGTCTCGAACTCCCG 227
                                                                                                                                                                                                                                                                                                                                                                                                                                        subunit alpha-6,
                                                                                                            standard;
                                                                                                                                                                                                                       CTGGTCTCGAACTCCTG
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                                                                                                                                                                                                                                                                                                           Conservative
                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0079678P
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                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                               94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jarvis T,
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                                                                                                                                                                                                                                                                                                                                                                                                                                     or integrin subunit beta-3
                                                                                                            ВP
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                                                                                                                                                                                                                                                                                                                                 Score 15.4; DB 1;
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                    DB 1;
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                                                                                                                                                                                                                                                                                                                                                 Length 17
                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                           Gaps
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RESULT 1844
AAA25553/c
ID AAA2555
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                                                                                                                                                                                                                                                                                                                                                                                The present invention describes nucleic acids (A) that interact stably with a target sequence and contain at least one phosphoro (di)thioate link, having endonuclease activity. (A), and more generally any catalytic pucleic acid (A) that modulates expression of the oestrogen receptor gene, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or for other conditions associated with levels of oestrogen receptor.

Recause of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of the same way that restriction endomucleases are used with DNA). The combination of therapeutic targets, and as research resistance to nucleases, binding affinity and/or activity. AAA2393 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences. AAA24748 to AAA26105 represent their corresponding target sequences. AAA24748 to AAA26105 represent their corresponding target sequences. AAA2593 to AAA26105 represent their corresponding target sequences. AAA2593 to AAA26105 represent their corresponding target sequences. AAA26219 to AAA26211 represent their corresponding target sequences and antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Thompson JD, Beigelman L, McReynolds M, Zwick M, Jarvis Matulic-Adamic J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 77; Page 71; 148pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oestrogen receptor hammerhead ribozyme target sequence
                                                                                                                 AAA25553 standard;
                                                                                                                                                                                                                                                                                                                                       Sequence
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23-JUN-1998;
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                                             19-JUL-2000 (first entry)
                                                                                AAA25553;
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                                                                                                                                                                                                                                                                     16;
                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                       BP; 2 A; 0 C; 1 G;
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98US-00103636
                                                                                                                 DNA; 17
                                                                                                                                                                                                                                                                                    94.1%;
                                                                                                                                                                                                                                                                                                      1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
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ris T, Woolf T,
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                                                                                                                                                                                                                                                                                      Score 15.4;
Pred. No. 1
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Haeberli
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Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2051.

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The present invention describes nucleic acids (A) that interact stably contain at least one phosphoro (di) thioate contain at least one phosphoro (di) thioate concerning that modulates expression of the oestrogen receptor concleic acid (A') that modulates expression of the oestrogen receptor conterconditions associated with levels of oestrogen receptor conditions associated with levels of oestrogen receptor conditions associated with levels of oestrogen receptor correlate inhibition of gene expression with alterations in phenotype, correlate (for RNA, in the same way that restriction endonucleases are consistence to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA25993 to AAA26107 to AAA26218 represent their corresponding target sequences. AAA2619 to AAA26271 represent oestrogen receptor hammer corresponding target antisense oligonucleotides used in the exemplification of the present corresponding target sequences. AAA26219 to AAA26271 represent oestrogen receptor hammer point of the present corresponding target sequences. AAA26219 to AAA26271 represent their corresponding target sequences and continents oligonucleotides used in the exemplification of the present corresponding target in the sequences and continents of the present corresponding target sequences.
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                                                                                                                                                                                                                                          RESULT 1845
AAA25554/c
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Best Local (
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Reynolds
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23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 77; Page 83; 148pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acids that interact, and optionally cleave, target sequences
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                                                                       Oestrogen receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 14 A; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC
  Oestrogen receptor;
hammerhead ribozyme;
                                                                                                                          19-JUL-2000
                                                                                                                                                                                                                      AAA25554
                                                                                                                                                                                                                                                                                                                                                                                         429
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĭ,
                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                         TTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beigelman L, Mcswiggen JA,
Zwick M, Jarvis T, Woolf T,
                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0082404P
98US-00103636
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                                                                       hammerhead ribozyme target sequence
                                                                                                                                                                                                                        DNA; 17
c-raf; k-ras; bcl-2; ribozyme; cleavage;
; hairpin ribozyme; antisense oligonucleo
                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;
                                                                                                                                                                                                                        ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.4; DB 1; Length 17; Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 3 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
       antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 Other;
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Haeberli
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                              SEQ ID NO:2052
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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cc gene, are used to treat cancer (particularly of breast or endometrium).

Cc in vivo or by transforming cells ex vivo and implanting treated cells, or

Cc for other conditions associated with levels of oestrogen receptor.

Cc Because of the high selectivity for targeted RNA, (A) can also be used to

Cc correlate inhibition of gene expression with alterations in phenotype,

Cc particularly for identification of therapeutic targets, and as research

Cc reagents (for RNA, in the same way that restriction endomucleases are

Cc used with DNA). The combination of modifications in (A) improves

Cc vesistance to nucleases, binding affinity and/or activity. AAA23503 to

AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and

Cc AAA25993 to AAA25992 represent their corresponding target sequences,

Cc AAA25993 to AAA26107 to AAA26218 represent their corresponding target

Sequences. AAA36219 to AAA26271 represent their ribozyme sequences and

Cc sequences. AAA36219 to AAA26271 represent other ribozyme sequences and

Cc invention
                                                                                                                                                                                                                                                                                                            AAA25180
                                                                                                                                                                                                                                                                                                                                   RESULT 1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acids that interact, and optionally cleave, target sequences, used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thompson JD, Reynolds M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-APR-1998;
23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          anticancer; breast cancer; endometrium cancer;
hammerhead ribozyme; hairpin ribozyme; antisense oligon gene expression modification; cancer; phosphorothioate;
                             Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 14 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           with a target sequence and contain at least one phosphoro(di)thioate link, having endonuclease activity. (A), and more generally any catal nucleic acid (A') that modulates expression of the cestrogen reception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 77; Page 83; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-013248/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matulic-Adamic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-APR-1999;
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                                                                                                                 Oestrogen
                                                                                                                                                                         19-JUL-2000
                                                                                                                                                                                                                                                                               AAA25180 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             428
                                                                                                                                                                                                                                                                                                                                                                                                                           17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h 1.6%;
Similarity 94.1%;
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                                                                                                              receptor hammerhead ribozyme target sequence
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                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0082404P
98US-00103636
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 C; 0 G;
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                                                                                                                                                                                                                                                                                     ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and more generally any catalytic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Karpeisky A,
Haeberli P;
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                                                                                                                       SEQ
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for other conditions associated with levels of oestrogen receptor. Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of modifications in (A) improves resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA24748 to AAA25992 represent their corresponding target sequences. AAA25993 to AAA26107 to AAA26218 represent coestrogen receptor hairpin ribozyme sequences and aAAA26107 to AAA26218 represent their corresponding target sequences. AAA2619 to AAA2619 to AAA26210 represent their corresponding target sequences and aAAA26107 to AAA26218 represent other ribozyme sequences and antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    with a target sequence and contain at least one phosphoro(di)thioate link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor gene, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                 Ribozyme; erythropoietin; interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 77; Page 71; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acids that interact,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thompson JD,
Reynolds M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-APR-1998;
23-JUN-1998;
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   WO200061729-A2.
                                  Homo sapiens
                                                                                                                   Hammerhead ribozyme substrate #2947.
                                                                                                                                                    16-FEB-2001
                                                                                                                                                                                                                    AAF06150 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matulic-Adamic J;
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nes 16; Conserv
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Zwick M, Jarvis T, Woolf T,
                                                                                                                                                  (first entry)
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98US-00103636.
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                                                                                                                                                                                                                                                                                                                                                                                   1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                      0 C; 1 G; 15 T; 0 U; 0 Other;
                                                                                 granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                   Score 15.4; DB 1; Length 17; Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and optionally cleave, target sequences,
                                                                                                                                                                                                                                                                                                                                                                                 1.6e+03;
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Haeberli P;
                                                                                                                                                                                                                                                                                                                                                                      Indels
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Best Local S
Matches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CATATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoletin, granulocyte colony stimulating factor protein and
                       Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 2 A; 0 C; 1 G; 0 T; 14 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
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Claim 42; Page 123; 164pp; English
                                                                                                                                                                                                                                                                       Ribozyme; erythropoietin; granulocyte colony stimulating factor; interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 42; Page 123; 164pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-APR-1999;
                                                                                                 Blatt
                                                                                                                                                  12-APR-1999;
                                                                                                                                                                         11-APR-2000; 2000WO-US009721
                                                                                                                                                                                                                                                                                                              Hammerhead ribozyme substrate #2946.
                                                                                                                                                                                                                                                                                                                                      16-FEB-2001
                                                                                                                                                                                                                                                                                                                                                               AAF06149;
                                                                                                                                                                                                                                                                                                                                                                                      AAF06149 standard;
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                                                                         WPI; 2000-647423/62.
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                                                                                                                                                                                                                                                 Homo sapiens.
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                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
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                                                                                                 Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                 Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                       DNA;
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Pred. No. 1.
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                                                                                                 Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement CC decides of the invention are useful as probes and primers for detecting, CC component of a gene chip, in vitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, convector or antibodies directed against the pulpeptides are useful for CC proparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and
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Matches
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human fukutin;
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                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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Pred. No. 1.
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The invention relates to a novel isolated 17 mer nucleic acid sequence, component in the specification, a sequence containing at least 15 consecutive containing at least 15 consecutive containing at least 15 consecutive conditions at least 15 consecutive conditions at least 15 consecutive conditions at least 80 % identity to the 17 mer sequence with, after optimal conditions or the complement configuration of them under highly stringent conditions, or the complement configuration of the invention are useful as probes and primers for detecting conditions of the invention are useful as probes and primers for detecting conditions of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, colls containing the vector or antibodies directed against the polypeptides are useful for corpoparation of pharmaceuticals for prevention and/or treatment of viral containing the expression of the nucleic acids in schizophrenia. Analysis of the expression of the 17 mer nucleic acids in the containing the confirmation of the expression of the 17 mer nucleic acids in the containing the contain

samples

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

Disclosure; Page 562; 720pp; French.

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MOLECULAR ENGINES LAB

17-SEP-2001; 2001FR-00011978. 17-SEP-2002; 2002WO-IB004208 27-MAR-2003 WO2003025175-A2 Homo sapiens

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RESULT 1850
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene antisense; sense; tumour; cell degeneration; cancer; Alzheimer's dis schizophrenia; protein chip; gene therapy; tumour suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 4 A; 7 C; 3
                                                                                                                                                                                                                                                                                                                                                                           schizophrenia;
human fukutin;
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RESULT 1851
ABT38151
The invention relates to a novel isolated 17 mer nucleic acid sequence, compared in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement coff any of them, or the corresponding RNA. The novel isolated nucleic colds of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cells containing the nucleic acids, cells containing the corresponding vectors containing the nucleic acids, cells containing the corresponding to the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in gatient samples is useful for diagnosis and/or prognosis of these containing the useful for prognosis of these and seven prognosis of these and some containing the polypeptides can also be used to generate antibodies, and containing the useful as components of protein containing the useful for prognosis of these containing the useful for prognosis of the containing the useful for prognosis of the containing the useful for progn
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Pred. No. 1
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cc given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that CC hybridizes to them under highly stringent conditions, or the complement CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, cp polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for diseases that are characterised by development of tumours or cell components. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chips. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour surrection.
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                                                   unclectides from the 17 mer sequence, a sequence with, after optimal controlled from the 17 mer sequence, a sequence with, after optimal conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic cacids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying and primers for detecting, cidentifying, quantifying and/or amplifying and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collagonated production of containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral cidentesses that are characterised by development of tumours or cell cidentesses that are characterised by development of tumours or cell cidentesses that are characterised by development of tumours or cell cidentesses and components of these contained to generate antibodies, and contained the polypeptide and antibodies are useful as components of procein the polypeptide and antibodies are useful as components of procein chips. The nucleic acid sequences of the invention can be used in gene
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                    This polynucleotide sequence represents a tumour suppression human fukutin oligonucleotide of the invention
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RESULT 1854
ABT38728/c
                                                         Consider the interest of a novel formation of the given in the specification, a sequence containing at least 15 consecutive considering the specification, a sequence with, after optimal conditions, at least 80 % identity to the 17 mer sequence with, after optimal conditions, or the term under highly stringent conditions, or the complement configurent, and for the invention are useful as probes and primers for detecting, conditions of the invention are useful as probes and primers for detecting, conditions of the invention are useful as probes and primers for detecting, conditions of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, e.g. as one conduction of recombinant polypeptides. Any of the nucleic acids, colls containing the vector or antibodies directed against the polypeptides are useful for component of pharmaceuticals for prevention and/or treatment of viral configuration, specifically cancer but also Alzheimer's disease and constitutional specifical constitution of the 17 mer nucleic acids in chips. The nucleic acid sequences of the invention can be used in gene chips. This polympelides can also be used to generate antibodies, and contained the components of these contained the components of the sequences of the invention can be used in gene contained to the components of the componen
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT38728;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 544; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia;
human fukutin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumour suppression related human fukutin oligo SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to a novel isolated 17 mer nucleic acid sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      821 GATCTCTGGACCTTGTG 837
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry
                                           polynucleotide sequence fukutin oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein chip; gene ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 1.6e+03
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                                              represents
of the inve
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                                                invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
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disease;
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Sequence 17

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RESULT 1855
                                                                               The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement CC display of them, or the corresponding RNA. The novel isolated nucleic CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, complement of component of a gene chip, in vitro as (anti)sense reagents, and for proparation of pharmaceuticals for prevention and/or treatment of viral CC polypeptides, vectors containing the nucleic acids, cells containing the proparation of pharmaceuticals for prevention and/or treatment of viral CC degeneration, specifically cancer but also Alzheimer's disease and CC diseases that are characterised by development of tumours or cell containing the polypeptides are useful for diagnosis and/or prognosis of these CC diseases. The polypeptides and antibodies are useful as components of protein characterised by a containing the polypeptides and antibodies are useful as components of protein characterises and antibodies are useful as components of protein characterises and antibodies are useful as components of protein characterises and antibodies are useful as components of protein characterises and antibodies are useful as components of protein characterises. The polypeptides can also be used to generate antibodies, and contained the contained of the contained of the characteristic contains of the characteristic contains of the contained of the contained of the contained of contained the contain
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 330; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011978.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    schizophrenia;
human fukutin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour suppression
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT36908 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          479 AGTGCAGTGGTGTGATC 495
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                                                                      This
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amson R,
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                                         polynucleotide sequence represents a tum fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein chip; gene ds.
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Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IJ
                                                              tumour suppression
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Best Local Similarity

1.6%; 7 C; 4 G;

Score 15.4; DB 1; Pred. No. 1.6e+03;

Length 17;

Matches

Conservative

0

Mismatches

Indels

<u>,,</u>

Gaps

0

Query Match Best Local Similarity

1.6%; 7 C; 4 G;

Score 15.4; DB 1 Pred. No. 1.6e+03

Length 17;

17

BP;

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4 T;

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0 Other; DB 1;

Query Match

Sequence 17

BP;

1 A;

5 T;

0 U;

0 Other;

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RESULT 1856
ABT35856
The invention relates to a novel isolated 17 mer nucleic acid sequence, cC given in the specification, a sequence containing at least 15 consecutive cnucleotides from the 17 mer sequence, a sequence with, after optimal chairment, at least 80 % identity to the 17 mer sequence, a sequence that the hybridizes to them under highly stringent conditions, or the complement cof any of them, or the corresponding RNA. The novel isolated nucleic cacids of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the cetor or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tunours or cell diseases that are characterised by development of tunours or cell cacids expression of the 17 mer nucleic acids in Schizophrenia. Analysis of the expression of the 17 mer nucleic acids in the polypeptides can also be used to generate antibodies, and coth the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene characterised by development of the polypeptides and containing the polymental and antibodies are useful as components of protein chips. This polymucleotide sequence represents a tumour suppression containing the components of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression containing the invention can be used in gene that the invention can be used in gene the polyment of the invention can be used in gene chips.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT35856;
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human fukutin; ds.
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                                                                                                                                                                                         CC given in the specification, a sequence containing at least 15 consecutive cc given in the specification, a sequence containing at least 15 consecutive contices from the 17 mer sequence with, after optimal conditions at least 18 consecutive containing at least 15 consecutive conditions at least 18 consecutive conditions, or the complement of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for conseases that are characterised by development of tumours or cell conseases that are characterised by development of tumours or cell conseases that are characterised by development of tumours or cell conseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of these contains. The nucleic acid sequences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in gene characteristic descences of the invention can be used in g
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human fukutin; ds.
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                                                     The invention relates to a novel isolated 17 mer nucleic acid sequence, considering at least 15 consecutive mucleotides from the 17 mer sequence with, after optimal calignment, at least 80 % identity to the 17 mer sequence that confide them under highly stringent conditions, or the complement confide them continues to them them the corresponding RNA. The novel isolated nucleic cacids of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, coplypeptides, vectors containing the nucleic acids, collscent or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral consess that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell consesses that are characterised by development of the consess and so chizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression contained the contained contained the contained of the invention can be used in gene therapy. This polynucleotide sequence of the invention can be used in gene contained the invention.
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and transfected cells.
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                                                                                                                                                                                                                   The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that consequence, a sequence that by bridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acid for any of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral consenses that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and containing the schizophrenia. Analysis of the expression of the 17 mer nucleic acids in containing the polypeptides and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene chips nolymerication of sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene chips.
                                                                                           Query Match
Best Local :
                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABT40194
                                                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 715; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2001; 2001FR-00011978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              schizophrenia;
human fukutin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-JUN-2003
                                                                                                                                                                                     therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and transfected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR ENGINES LAB
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17
                                                                                             Similarity
                                     AGTGCAGTGGCGCAATC 669
                                                                                                                                                   BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein chip; gene therapy; tumour suppression;
ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cells.
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                                                                                         94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tuijnder M;
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                                                                                             Score 15.4; DB 1; Pred. No. 1.6e+03;
                                                                           Mismatches
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                                                                         <u>,</u>
                                                                       Gaps
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RESULT 1860

RESULT 1861 ABT40150/c ID ABT4015

ABT40150 standard; DNA; 17

BP

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869 GATTACAGGCGTGAGCC 885

GATCACAGGCGTGAGCC 17

l Similarity

Conservative

0

Mismatches

Indels

0,

Gaps

0

.6e+03

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The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence with, after optimal CC dispment, or them under highly stringent conditions, or the complement CC of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell containing the expression of the 17 mer nucleic acids in CC diseases. The polypeptides can also be used to generate antibodies, and coliscance is the polypeptide and antibodies are useful as components of these containing the polypeptide and antibodies are useful as components of protein characteristic diseases that supplies is useful for disgnosis and/or prognosis of these containing the polypeptide and antibodies are useful as components of protein characteristic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression crelated human fukutin oligonucleotide of the invention
Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 182; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; sense; tumour; cell degeneration; cancer; Alzheimer schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
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                                                                                  Sequence 17
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                                                                                      BP; 4 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
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                      1.6%;
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                        Score 15.4;
Pred. No. 1.
                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer; Alzheimer's
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s disease;
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RESULT 1862
ABT35874/c
ID ABT3587
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Matches 16
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                                                                                                                                                                                                                                                                                                                   Sequence
                                          ABT35874 standard; DNA; 17
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                                                                                                                                                                                                                                                                                                                   BP; 4
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                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                    1.6%;
                                                                                                                                                                                                                                                                                                                   7 C; 3
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Pred. No. 1.6e
0; Mismatches
                                                                                                                                                                                                                                                                                                                       G; 3 T;
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ABT35874;

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BXXXI

ABT39264;

12-JUN-2003

(first entry)

ABT39264 RESULT 1863

ABT39264 standard; DNA; 17

ВР

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The invention relates to a novel isolated 17 mer nucleic acid sequence, consciudes from the 17 mer sequence containing at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal calignment, at least 80 % identity to the 17 mer sequence, a sequence that configures to them under highly stringent conditions, or the complement conflictions, or the complement conflictions, or the complement conflictions are useful as probes and primers for detecting, configured in the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for comparation of pharmaceuticals for prevention and/or treatment of viral configuration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in gatint samples is useful for diagnosis and/or prognosis of these containing the useful as components of protein contains. The pulpeptide and antibodies are useful as components of protein contains. The nucleic acid sequences of the invention can be used in gene therapy. This polymcleotide sequence for the invention can be used in gene contained the invention can be used in gene contained the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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schizophrenia; pro
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                                                                                                                                                                                                                                      Sequence 17
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                                                                                                                                                Similarity
                                                         AGTGCAGTGGTGATC 495
AGTGCAGTAGTGTGATC 1
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                                                                                                                   0,
                                                                                                                                                Score 15.4; DB 1;
Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                            0 Other;
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er; Alzheimer's disease;
                                                                                                                         Indels
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Tumour suppression related human fukutin oligo

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RESULT 1864
ABT40140/c
                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel isolated 17 mer nucleic acid sequence, controlled the specification, a sequence containing at least 15 consecutive concleotides from the 17 mer sequence, a sequence with, after optimal conditions at least 15 consecutive to the 17 mer sequence with, after optimal conditions at least 18 the state of the sequence of the sequence that the formal sequence of the complement of any of them, or the corresponding RNA. The novel isolated nucleic conditions of the invention are useful as probes and primers for detecting, conditioning quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of pharmaccuticals for prevention and/or treatment of viral confidence of pharmaccuticals for prevention and/or treatment of viral confidence of the are characterised by development of tumours or cell confidence of the expression of the 17 mer nucleic acids in confidence of the expression of the 17 mer nucleic acids in confidence of the sequence of the invention can be used in gene therapy. This polynucleotide sequence of the invention can be used in gene characterised by developments of the sequence of the sequence of the sequence of the invention.
                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 16
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Tumour suppression related human fukutin oligo SEQ ID No
                                          13-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 606; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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schizophrenia; pro
human fukutin; ds.
                                                                                   ABT40140;
                                                                                                                        ABT40140 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17
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                                                                                                                                                                                                                                                                          837
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                                                                                                                                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                               GATCTGCCTGCCTCAGC 17
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                                        (first entry)
                                                                                                                                                                                                                                                                                                                                  1.6%;
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Pred. No. 1.6e
0; Mismatches
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                                                                                                                                                                                                          RESULT 1865
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Best Local
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Cytostatic; immunostimulant; gene therapy; vaccine; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                      Human MDZ7
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17
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                                                                                   20-NOV-2003
                                                                                                                          ADB04318;
                                                                                                                                                                   ADB04318 standard;
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                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                      scanning oligonucleotide SEQ ID 5304.
                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                               (first entry)
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S

1.6%; 94.1%;

Score 15.4; Pred. No. 1 Mismatches

.6e+03; DB 1;

Length 17; Indels

°;

Gaps

0

0

DNA;

BX3X8X8

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acids of the invention are useful as probes and primers for detecting, condentifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and containing the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 709; 720pp; French
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RESULT 1866
ADB04317
ID ADB0431
XX Cytosta
XX Cytosta
XX Cytosta
XX Chromos
XX Chromos
XX Gevelop
XX ADB0431
XX PN EP12817
XX
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteins and their coding sequences: MDZ3, MDZ4, MDZ7; MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating a medicament for treating and manufacturing a medicament for treating a medicament for treating and manufacturing a medicament for treating and manufacturing a medicament for treating and manufacturing and medicament for treating and manufacturing and medicament for treating and manufacturing and medicament for treating and medicament f
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3:
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chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                            Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1;
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                                                                                                                                                                                                                                                                                                   Human MDZ7 scanning oligonucleotide SEQ ID 5303.
                                                                                                                                                   developmental
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                                                                                             Homo sapiens
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16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.6%;
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Pred. No. 1.6e+03;
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                                                                                                                                                                                     chromosome 15q26.1; cancer;
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The present invention relates to novel human zinc finger-containing CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder cor in manufacturing a medicament for treating or preventing a disorder. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as proteins are useful as therapeutic agents for gene therapy or as the inverse in the proteins are useful as therapeutic agent the inverse in the inverse in the proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disord associated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                             Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                                                                                            vaccines. The present sequence was used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 5303; 103pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nguyen
     DB 1;
                                                                                                    illustrate the
Length 17;
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tivity of
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Matches
                                             Query Match
Best Local &
                  650 TGGAGTGCAGTGGCGCA 666
                                     16;
                                               Similarity
TGGAGTGCAGTGGCCCA 17
                                       Conservative
                                               1.6%;
                                       0;
                                                Score 15.4; DB 1;
Pred. No. 1.6e+03;
                                       Mismatches
                                       Indels
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                                        Gaps
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밁 S

ADB04437 standard; DNA; 20-NOV-2003 (first entry) 17

Human MDZ7 scanning oligonucleotide SEQ ID

5423

RESULT 1867
ADB04437
ID ADB0443
XX ADB0444
X Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss. 30-JUL-2002; 2002EP-00016874. EP1281758-A2 developmental 05-FEB-2003. sapiens.

02-AUG-2001; 2001US-00922181

(AEOM-) AEOMICA INC

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ADB04446
II ADB0
XX ADB0
XX ADB0
XX ADB0
XX Humm
XX Cytr
KW Cytr
KW Chr
KW Chr
XX Hom
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Best Local S
Matches 16
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New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disord associated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human MDZ7
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Pred. No. 1.6e+03;
0; Mismatches 1
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Query Match
Best Local Similarity
                                                                                                                               proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 1p21.3-22.2, MDZ4 is encoded at chromosome 1p21.3-22.2, MDZ4 is encoded at chromosome 1p21.2 and MDZ12 is encoded at chromosome 1sq26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                  Sequence 17 BP; 4 A; 1 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; SEQ ID NO 5432; 103pp; English
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1.6%;
                          Score 15.4;
                                DB 1;
                          Length 17;
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                                                                                                                                                                                                   Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7 chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q
                                                                                                                                                                                                                               Human MDZ7
                                                                                                                                                                                                                                             20-NOV-2003
                                                                                                                                                                                                                                                                       ADB04316 standard;
                                                                                                                                                                   EP1281758-A2.
                                                                                                                                                                                  Homo
                                                                                                                                                                                               developmental
                                                                                                                                                                                                                                                          ADB04316
                                                                                                                                                                                                                               scanning
                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                               disorder; ss.
                                                                                                                                                                                                                                                                       DNA; 17
                                                                                                                                                                                                                                oligonucleotide SEQ ID 5302
                                                                                                                                                                                                     chromosome 16p11.2; chromosome 15q26.1; cancer;
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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 6g21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15g26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy

and MDZ12 sequences are useful in therapy

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ1, MDZ1 or MDZ12, e.g. cancer.

MDZ3,

or MDZ12, e.g. cancer.

ij

NO 5302; 103pp;

English.

Shannon M,

GuY,

Nguyen C;

02-AUG-2001; 2001US-00922181 30-JUL-2002; 2002EP-00016874.

(AEOM-) AEOMICA INC

05-FEB-2003

S

777 16;

TTTTTAGTAGAGATGGG 793

Conservative

0;

Mismatches

0

Gaps

0

Pred. No.

1.6e+03;

Matches

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RESULT 1870
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ID ADB0444
XX ADB0444
XX ADB0444
XX Cytosta
KW Cytosta
KW Zinc fi
KW Chromos
KW Chromos
KW Chromos
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XX Homo sa
XX D5-FEB-
XX D5-FEB-
XX O5-FEB-
XX O5-FEB-
XX WPI; 20-AUG-
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Best Local &
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                The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ4, MDZ7, MDZ12. MDZ3; sencoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 arguences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12. The probes are
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ilarity 94.1%;
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Pred. No. 1
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Mismatches
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constructing microarrays for measuring gene

The

Best Loca Matches

Similarity

1.6%;

Score 15.4; D Pred. No. 1.6e 0; Mismatches

1.6e+03;

Indels

0;

Gaps

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DB 1;

Conservative

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Query Match

Sequence

17

BP; 5

A; 1 C; 4

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                                                                                                                 The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome fap11.2 and MDZ12 is encoded at chromosome 1sq26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ7, or MDZ12 genetic locus. The probes are material in Construction microarrance for measuring accounted the probes are underly manufactured for manufacturing microarrance for measuring accounted the probes are manufactured for manufacturing microarrance for measuring accounted manufacturing microarrance for manufacturing microarrance for measuring accounted manufacturing microarrance for microarr
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                                              useful in constructing microarrays for measuring gene expression. proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8; SEQ ID NO 5430; 103pp; English.
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RESULT 1873
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The
                                                                                                                                                                                                                                                                                                                                                                                                                                             useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 6g21.3-22.2, MDZ7 is encoded at chromosome fighl.2 and MDZ12 is encoded at chromosome 15g26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                                                                                                                ATTTTTAGTAGAGACGG 17
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                                                                                                                                                                                                                                                                                                                                                                                     BP;
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                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                         acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; antianti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encod HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
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                                                              Human K-Ras DNAzyme substrate #697.
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid enco HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                      Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 58; Page 98; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 3 C; 6 G; 0 T; 5 U; 0 Other;
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 29-MAY-2001; 2001US-0294140P
06-JUN-2001; 2001US-0296249P
                                           29-MAY-2002: 2002WO-US016840
                                                                                                  WO200297114-A2
                                                                                                                           Homo sapiens.
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1.6e+03;
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Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human in his contraction and AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                                                                                                                                                                                  Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-140484/13
                                                                                                                                        29-MAY-2001; 2001US-0294140P
06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
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                                                                                                                                                                                                                                                                                                                                                                             Human K-Ras DNAzyme substrate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 58; Page 98; 185pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC.
                                                      WPI; 2003-140484/13
                                                                                 Mcswiggen J;
                                                                                                                                                                                                                                                             WO200297114-A2
                                                                                                                                                                                                                                                                                        Homo sapiens.
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                                                                                                              (RIBO-) RIBOZYME PHARM INC
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Pred. No. 1.6e+03
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Novel short interfering RNA and enzymatic nucleic acid useful treating cancer, modulates the expression of a nucleic acid er HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequence

encoding

Claim 58; Page 98; 185pp; English.

a novel short interfering RNA (siRNA) nucleic

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RESULT 1877
ABZ60586
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acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecule activity. The nucleic acid molecule activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate,
                                                                                                                                                                                   Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
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                                                                                                                   The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                      Claim
                                                                                                                                                                                                                                                      WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                     Mcswiggen J;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             K-Ras
                                                                                                                                                  58; Page 98; 185pp; English.
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Pred. No. 1.6e+03
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                                                                                  N-Ras,
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Query Match Best Local S Matches 13

Local Similarity

1.6%;

Score 15.4; Pred. No. 1.

.6e+03

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Matches
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                          acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65331, ABZ66520 - ABZ65535 represent substrate/target sequences for the human ribozymes of the invention
                                                                                                                                                                                                                                                                   Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
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                                                                                                                                                                                                       The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                         Claim
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                                                                                                                                                                                                                                     58; Page 98; 185pp; English.
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RESULT 1880
ABZ60604
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ABZ60566
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
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                ABZ60604;
                                                  ABZ60604 standard;
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                                                                                                                                                                                           Local Similarity es 13; Conserv
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                                                  RNA;
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Pred. No. 1.
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29-MAY-2001;
06-JUN-2001;
10-SEP-2001;
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WPI; 2003-140484/13.
                                   Mcswiggen
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                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                         Human K-Ras DNAzyme substrate
                                                                         (RIBO-) RIBOZYME
                                                                                                               2001US-0294140P.
2001US-0296249P.
2001US-0318471P.
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                                                                             PHARM INC.
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The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ6585 represent substrate/target sequences for the human in ABZ6585 represent substrate/target sequences for the human Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences. Claim 58; Page 98; 185pp; English.

Sequence 17 BP; 1 A; 5 C; 6 ଜ; T; 5 U; 0 Other

ribozymes of the invention

Query Match Best Local S Matches 11 Similarity Conservative 1.6%; . Score 15.4; Pred. No. 1. Mismatches 1.6e+03; DB 1; Length 17; Indels 0 Gaps 0

RESULT 1881 ABZ60597 ABZ60597 standard; RNA; 17 21-MAR-2003 ABZ60597; (first entry) ВP

Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; antianti-rheumatic; cancer; AIDS; ss. Human K-Ras DNAzyme substrate #709 anti-HIV;

WO200297114-A2

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Query Match
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Thes 5; Conserve
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                                          29-MAY-2001; : 06-JUN-2001; : 10-SEP-2001; :
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                                                                                                                                                                                                                      Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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06-JUN-2001; 2001US-0296249P-
10-SEP-2001; 2001US-0318471P-
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                                                                                                     29-MAY-2002; 2002WO-US016840
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                                                                                                                                                                                         Homo sapiens.
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                  (RIBO-) RIBOZYME
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2001US-0296249P.
2001US-0318471P.
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                  PHARM INC
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Pred. No. 1.6e+03;
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29-MAY-2001; 2001US-0294140P 06-JUN-2001; 2001US-0296249P 10-SEP-2001; 2001US-0318471P

29-MAY-2002; 2002WO-US016840

05-DEC-2002. WO200297114-A2

Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

WPI; 2003-140484/13.

Mcswiggen

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(RIBO-)

RIBOZYME

PHARM

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The invention relates to a novel short interfering RNA (siRNA) nucleic

Claim 58; Page 98; 185pp; English

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RESULT 1883
ABZ60567
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enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
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Similarity 94.1%;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.
                                            The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration.
                                                                                                                                                                                                                                                  New isolated nucleic acid, useful with tumors and cell degeneration, and transfected cells.
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                                                                                                                                                                                                                     Disclosure;
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                               are characterised by specifically cancer !
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4 G;

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put

also Alzheimer's

disease and schizophrenia

RESULT 1886

AXU ADB44008

ADB44008 standard; DNA; 17

ВP

ADB44008;

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RESULT 1885
ACC68479
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                                                                                                                          The present invention relates to murine oligonuclectides (ACG62754-ACG68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonuclectides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip; in vitro as (anti)sense reagents; and (2) for production or recombinant polypeptides. The oligonuclectides are useful for prepara of pharmaceuticals for prevention and/or treatment of viral diseases are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful with tumors and cell degeneration, and transfected cells.
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                                                                                                    Sequence 17
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GATCTGCCTGCCTCTGC
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Pred. No. 1.6e+03;
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Pred. No. 1.6e+03;
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RESULT 1887
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AC ADB4114
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DT 18-DEC-
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                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences, and of fragments of at least 180% identify, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. A sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, conditions and antisense sequences, of nucleotides involved in tumour conditions or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and colls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Con relation the expression of the nucleotides can be used for diagnosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, or expression of the nucleotides diseases with abnormal contentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                           Query Match
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primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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Tumour suppression/reversion associated nucleotide
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cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

Homo sapiens

15-MAY-2003

17-SEP-2002; 2002WO-IB004219. 17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 203; 771pp; French

The invention relates to the isolation of 6327 nucleotide sequences, and fragments of at least 10% identity, after optimal alignment, with the mucleotides, a sequence that hybridizes under stringent conditions with the mucleotides, a sequence that hybridizes under stringent conditions with the mucleotides, or the complement, or corresponding NNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour csuppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as cexperimental models. The nucleotides (also vectors containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).

CC analysis of the expression of the nucleotides can be used for diagnosis also be used to screen for their specific interactive molecules, containly useful for treating diseases associated with abnormal containly useful for treating diseases associated with abnormal

Sequence 17 BP; 5 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match Best Local (Matches 16; Similarity Conservative 1.6%; Score 15.4; DB 1; 94.1%; Pred. No. 1.6e+03; <u>,</u> Mismatches Length 17; Indels 0; Gaps

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밁 S 479 AGTGCAGTGGTGATC 495 17

RESULT 1888 ADB43650 standard;

DNA;

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18-DEC-2003 04-DEC-2003 (revised)
(first entry)

XSXSSXXX Tumour suppression/reversion associated nucleotide #3973.

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Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides associated with abnormal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleotides. The nucleotides are used as probes or primers for detectidentifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour
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        primer; probe; tu
virus resistance;
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                                 cytostatic;
                                                      Tumour suppression/reversion associated nucleotide #4893.
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        antiviral; neuroprotective; nootropic; neuroleptic; ss; be; tumour suppression; tumour reversion; apoptosis; tance; transgenic animals; Alzheimer's disease; schizoph
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antigen,
lso related
            schizophrenia;
                                                                                                                                                                                                                                        0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   detecting
                                                                                                                                                                                                                                      Gaps
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suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid encoding huseful e.g. for treatment opolypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleotides. The nucleotides are used as probes or primers for desidentifying, quantifying and/or amplifying nucleic acids, as in sense and antisense sequences, of nucleotides involved in tumour
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2002; 2002WO-IB004219
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Sequence 17
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   BP; 5
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   5 C; 3 G; 4 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human prostate membrane-specific antigen, of tumors and viral infection, also related
       Ģ
           0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s for detecting as in vitro
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Query Match 1.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

492 GATCACAGCTCACTGCA 508

ADB44878 ID ADB44878 XX

ADB44878 standard; DNA; 17 BP

AC ADB44878;

T 18-DEC-2003 (first entry)

E Tumour suppression/reversion associated nucleotide #5201

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

OS Homo sapiens

PN WO2003040369-A2

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RESULT 1891
ADB44306
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnos and/or prognosis of these diseases. The nucleotides and polypeptides also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fragments of at least 15 consecutive nucleotides of these nucleotides, esequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-MAY-2003
                                                                                                                                                       primer; probe; tumour suppres
virus resistance; transgenic
                                                                                                                                                                         cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     usetul e.g.
polypeptide
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17-SEP-2002; 2002WO-IB004219.
                                15-MAY-2003
                                                                   WO2003040369-A2
                                                                                                                                                                                                                                                               18-DEC-2003
                                                                                                                                                                                                                                                                                                                                    ADB44306 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-441574/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          837 GATCTGCCTGCCTCGGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                         \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
16; Conserv
                                                                                                                                                                                                                            suppression/reversion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acid encoding human prostate membrane-specific antigen, for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 640; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94.1%;
                                                                                                                                                                       suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                         animals; Alzheimer's
                                                                                                                                                                                                                              associated nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.4; DB 1; Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                     reversion; apoptosis;
neimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
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Query Match
                                                                                                                                                                                                                                                                                                                  The invention relates to the isolation of 6327 nucleotide sequences, if ragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides in nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypaptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and
                                                                                                            cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides car also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                   Sequence 17 BP; 1 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   useful e.g. for treatment of polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 573; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-441574/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A, Amson
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,
70
1.6%;
  Score 15.4;
Pred. No. 1
  1.6e+03
                          DB 1;
                        Length 17;
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RESULT 1892
AD844574/c
ID AD84457
XX AD84457
XX AD84457
XX Tumour
XX Cytosts
KW primer;
KW virus 1
KW virus 1
KW virus 1
KW W02003(
XX PN W02003(
XX PD 15-MAY-
PF 17-SEP-
XX PA (MOLE-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 16; Conservative
                                                                                                                                                                                       primer; probe; tumour suppression; tumour reversion; apoptosis
virus resistance; transgenic animals; Alzheimer's disease; sch
                                                                                                                                                                                                                                           Tumour suppression/reversion associated nucleotide #4897
                               17-SEP-2001; 2001FR-00011981
                                                                                                                                                                                                                    cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;
                                                                                                                                                                                                                                                                           18-DEC-2003
                                                                                                                                                                                                                                                                                                                                  ADB44574 standard; DNA; 17
                                                           17-SEP-2002; 2002WO-IB004219
                                                                                       15-MAY-2003
                                                                                                                   WO2003040369-A2
  (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                        837 GATCTGCCTGCCTCGGC 853
                                                                                                                                                                                                                                                                                                                                                                                                       GATCTGCCTGCCTTGGC 17
                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                        schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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ADB44518/c
ID ADB4
XX
AC ADB4
XX
AC ADB4-D
T 18-D
XX
Tumot
XX
Tumot
XX
Cytol
KW Cytol
KW Cytol
KW Viruu
KW diagg
XX
Homo
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Homo
XX
FN WO20
XX
FN 17-S
XX
FN 17-S
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FN (MOL
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FN WPI;
FO Tele
XX
WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                        cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB44518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression of the nucleotides.
   WPI; 2003-441574/41.
                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                  Tumour suppression/reversion associated nucleotide #4841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB44518 standard; DNA;
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                                    Telerman A,
                                                                                                                                            17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                              15-MAY-2003
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                                                                        (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         224 CCCGACCTCAGATGATC 240
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16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             larity 94.1%;
Conservative
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                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                    Tuijnder M;
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                             Alzheimer's disease; schizophrenia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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lso related
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                                                                                                                                                                                                                                                                                                                                                 88;
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cc nucleotides. The nucleotides are used as probes or primers for detecting, clientifying, quantifying and/or amplifying nucleic acids, as in vitro cc sense and antisense sequences, of nucleotides involved in tumour cc suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment cc or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Cc Analysis of the expression of the nucleotides can be used for diagnosis of these diseases. The nucleotides and polypeptides can can be used to screen for their specific interactive molecules, corrections or treating diseases associated with abnormal corrections of the millorians.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides.
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Matches
                                               Query Match
Best Local
                                                                            Sequence 17
                  479 AGTGCAGTGGTGATC 495
 17
                                      16;
                                                Similarity
AGTGGAGTGGTGATC 1
                                                                            BP; 5 A; 8 C; 1 G; 3 T;
                                      Conservative
                                               1.6%;
                                      <u>,</u>
                                               Pred.
                                                         Score 15.4;
                                        Mismatches
                                                 No. 1.6e+03;
                                                                             0 U;
                                                                             0 Other;
                                                         DB 1; Length 17;
                                        Indels
                                        <u>.</u>
                                        Gaps
                                        0
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expression of the nucleotides.

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09-OCT-2003
                                                                                                                                               glaucoma related
                                                                                                                                                       SNP;
                                                                                                                                                              Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
                                                                                                                                                                           Optineurin promoter motif, repeat element
                                                                                                                                                                                                                     ADE14015 standard; DNA; 17
                                                                                                                   US2003190617-A1
                                                                                                                                 Homo sapiens
                                                                                                                                                                                          29-JAN-2004
                                                                                                                                                                                                        ADE14015;
                                                                                                                                                       glaucoma;
                                                                                                                                                                                          (first entry)
                                                                                                                                                       progressive
                                                                                                                                                disorder;
                                                                                                                                               ocular hypertensive dis motif; repeat element;
                                                                                                                                                                                                                      ВP
                                                                                                                                                                            or regulatory region #124.
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New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the

Raymond V, Morissette

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2003-864168/80

(SIEE/) (RAYM/)

) SI B.) RAYMOND V.) MORISSETTE J.

(MORI/)

06-MAR-2002; 2002US-00091281.

06-MAR-2002; 2002US-00091281.

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ADE14019/

ID ADE1

XX ADE1

AC ADE1

AC ADE1

AX Opti

XX Opti

XX SNP;

KW SNP;

KW Glau

XX Homo

XX US20

XX US20

XX O6-M

XX (SIE

PA (RAY

PA (MOR

XX (MOR

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC least 20 but not more than 1500 consecutive nuclectides of the optineurin CC promoter appearing as ADE13890. Also included are the optineurin promoter coperably linked to a heterologous nucleic acid, a nucleic acid capable of CC detecting a single nucleotide polymorphism (SNP) in the optineurin promoter promoter, a host cell comprising the promoter operably linked to a CC heterologous sequence, diagnosing or prognosing glaucoma in a sample contained from a cell or bodily fluid (comprising glaucoma in a glaucoma CC in a promoter region of the optineurin gene, associated with a glaucoma CC phenotype), detecting a SNP sequence variation in a sample containing DNA, determining the presence or increased CC nucleic acid region containing the presence or increased CC susceptibility to glaucoma or to a progressive ocular hypertensive CC susceptibility to glaucoma in a patient, comprising providing CC nucleic acid region containing the variation within the optineurin containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and CC capable of detecting a solymorphism). The invention is used to diagnose and CC present sequence is an optineurin promoter motif, repeat element or pursual traver region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1895
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADE14019 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4 A; 1 C; 2 G; 10 T; 0 U; 0 Other;
                                 WPI; 2003-864168/80
                                                                                              Raymond V, Morissette J,
                                                                                                                                                               (SIEE/) SI E.
(RAYM/) RAYMOND V.
(MORI/) MORISSETTE
                                                                                                                                                                                                                                                                                            06-MAR-2002; 2002US-00091281
                                                                                                                                                                                                                                                                                                                                                         06-MAR-2002; 2002US-00091281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003190617-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Optineurin promoter motif, repeat element or regulatory region #128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated nucleic acid (N1) comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   glaucoma; progressive ocular hypertensive coma related disorder; motif; repeat elemen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 589 GGCTAATTTTTATTTT 605
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTAATTTTATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            regulatory region.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.6%;
ilarity 94.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ID NO 126; 159pp; English
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                                                                                                  Si.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
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Pred. No. 1.6e+03;
                                                                                              M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disorder,
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                                           CC least 20 but not more than 1500 consecutive nucleotides of the optineurin CC promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter CC promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or prognosing glaucoma in a sample contained from a cell or bodily fluid (comprising detecting a polymorphism CC in a promoter region of the optineurin gene, associated with a glaucoma CC phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation CC in a sample containing DNA, detecting the presence of an optineurin promoter reguence variation or in a sample containing DNA, detecting the presence of an optineurin promoter resulting in loss of visual field in a patient (or the severity CC or progression of glaucoma in a patient, comprising providing CC amplification primers that direct amplification of a selected CC nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and CC prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element or CC putative regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention least 20 but r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 11; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         relates to an isolated nucleic acid (N1) comprising
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Query Match
Best Local Similarity
Matches 16; Conserv 770 TTTTGTATTTTTAGTAG 17 TTTTATATTTTAGTAG 1 Conservative 1.6%; 786 0; Score 15.4; Pred. No. 1 Mismatches .6e+03 DB 1; Length 17; Indels <u>,</u> Gaps 0,

Sequence 17

BP; 11

A; 2 C; 0

G; 4 T; 0 U; 0 Other;

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RESULT 1896
ADE43565/C
ID ADE4356
XX
ADE4356
ADE4356
XX
ADE4356
ADE4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human IDE sequencing primer, SEQ ID 170.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE43565 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
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25-OCT-2001; 2001US-0339525P.
08-NOV-2001; 2001US-0336929P.
08-NOV-2001; 2001US-0338010P.
09-NOV-2001; 2001US-0338363P.
04-DEC-2001; 2001US-0337052P.
28-MAR-2002; 2002US-0368919P.

(NEUR-) NEUROGENETICS INC

03-JUL-2003

WO2003054143-A2

25-OCT-2002; 2002WO-US034679

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 RESULT 1897
ADI50915/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a method (M1) for determining a predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtained from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from upa (Urokinase plasminogen activator), SNCG (gamma-symuclein), IDE (insulindegrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid lypase), and TNFRSFG (Tumour Necrosis Factor Receptor-SFG), where the presence of at least one of the allelic variant of one or more polymorphic regions is indicative of a predisposition for or the occurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the occurrence of, and for treating neurodegenerative disease, particularly alzhemer's disease. The present sequence is a PCR primer, which was used the present sequence is a PCR primer, which was used the sequence of the present sequence is a PCR primer, which was used the present sequence is a PCR primer, which was used the present sequence is a PCR primer, which was used the present sequence is a PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining a predisposition for or the occurrence of neurodegenerative disease, e.g. Alzheimer's disease by detecting in a target nucleic acid the presence or absence of an allelic variant of one or more polymorphic
                                                                                                                                                                                                                                                                                                   cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Page 276; 848pp; English
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                                                                                                                                                                                                                                                                                                                                                                                     Human tumour suppression/reversion-related DNA sequence
New isolated nucleic acid, useful for treating viral diseases associated
                                                                                                                                                                                                   27-MAR-2003
                                                                                                                                                                                                                                  WO2003025177-A2
                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                  tumour suppression; tumour reversion; apoptosis; virus resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADI50915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADI50915
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                                                                  Telerman
                                                                                                                                 17-SEP-2001; 2001FR-00011980.
                                                                                                                                                                  17-SEP-2002; 2002WO-IB004523.
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                                                                                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGCTGGAGTGCAGTGG 662
                                                                P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGCTGGAGTGCAGTGG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 3 A; 8 C; 3
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                                                                  Amson
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.6%;
                                                                  Tuijnder M;
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Sampson AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 3 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang X,
Blacker I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dr.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tanzi RE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                     SeqID3418.
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17

AGTGAAGTGGTGTGATC

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                                                                                                                   Best Loc
Matches
                                                                          Query Match
                                                                                                                                          development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fip. wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure;
                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                   in the phenomena of tumour suppression, and/or resistance to viruses. The inven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and transfected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      with tumors and
                                                          Local
   479
                                         16;
                                                            Similarity
 AGTGCAGTGGTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 3418;
                                         Conservative
                                                                                                                   BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                      relates to novel isolated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell degeneration, also related polypeptides, antibodies
                                                            94.1%;
                                                                            1.6%;
   495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30pp; French
                                         0;
                                                            Score 15.4; DB 1;
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                               The invention may be useful for the
                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid sequences involved
                                                                              DB 1;
                                                                              Length
                                            Indels
                                           0
                                            Gaps
                                            ٥,
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RESULT 1898
ADIS0723/c
ID ADIS0723 standard; DNA; 17 BP.
XX
AC ADIS0723;
XX
DT 15-APR-2004 (first entry)
XX
DT tumour suppression/reversion-related DNA sequence SeqID3226.
XX
tumour suppression; tumour reversion; apoptosis; virus resistance;
XX
tumour suppression; apoptosis; virus resistance;
XX
tumour suppression; tumour reversion; apoptosis; virus resistance;
XX
tumour suppression; apoptosis; virus resistance;
XX
tumour suppression;
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17-SEP-2002; 2002WO-IB004523

17-SEP-2001;

2001FR-00011980.

27-MAR-2003

WO2003025177-A2

This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the

New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.

associated antibodies

SEQ ID NO

3226;

30pp; French

WPI;

2003-313354/30

Telerman

P

Amson R,

Tuijnder

(MOLE-)

MOLECULAR ENGINES LAB

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0

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RESULT 1899
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Best Local S
Matches 16
              This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                                                             ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                                                                                                                                                                                                                                                                                         tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
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                        disease,
                                                 New nucleic acid sequences associated with tumor suppression,
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                                      or virus
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                       resistance are useful to diagnose and t
nt of tumor cells and cell degeneration.
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                                                                                                                                        This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
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tumour regression; apoptosis; virus resistance; diagnosis;
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New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.

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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents an isolated nucleic acid sequence associated
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29-MAY-2001;
28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                         for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR), IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The mucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR contents of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase opprotein kinase PKR genes, for treating cancer and inflammatory disease
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascullar accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
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                                                                                          substrate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR target RNA in a cell. The present RNA sequence represents a human PKR target RNA in a cell.
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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prostaglandin D2 receptor; PTGDR; IkappaB kinase; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal melanoma; lymphoma; glioma; inflammatory disease;

antisense oligonucleotide;

neurite

growth

inhibitor; NOGO;

IKK;

cord injury; rheumatoid a

arthritis;

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RESULT 1914
ADL50193
ID ADL5019
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AC ADL5019
XC ADL5019
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DT 20-MAY-
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prostaglandin D2 receptor; rusus, prostaglandin D2 receptor; protein kinase PKR; cerebrovascular accident; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal central nervous system injury; CNS injury; spinal central nervous system injury; cns inflammatory disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                   antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
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                                                                                                                                                                    20-MAY-2004
                                                                                                                                                                                                                                             ADL50193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   substrate sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention comprises nucleic acids (e.g. antisense oligonucleotides) t down regulate the expression or inhibit the function of a receptor a neurite growth inhibitor, NGCO, prostaglandin D2 receptor (PTGDR), ppaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
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                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                             RNA; 17
                                                                                                                            sequence
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76.5%;
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Pred. No. 1.6e+03;
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             cord injury; cancer;
rheumatoid arthritis;
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is; sepsis;
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RESULT 1915
ADL50202
ID ADL5020
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 59; SEQ ID NO 3726; 317pp; English.
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein kinase PKR genes,
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                                                                                                                                                                                                   ADL50202 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             that down regulate the expression or inhibit the function of a receptor of a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDI) The nucleic acids of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                       940 TTACCCAGGCTGGAGTG 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   enzymatic nucleic acid that down-regulates expression of neurite h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or in kinase PKR genes, for treating cancer and inflammatory disease.
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for treating cancer
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                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
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PKR;
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tor (PTGDR),
                                                                                                                                                                                                                                                                                                                                                          Gaps
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antisense oligonucleotide; neurite growth inhibitor; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IK protein kinase PKR; cerebrovvascular accident; central nervous system injury; CNS injury; spinal cor

lymphoma;

inflammatory

CNS injury; spinal cord injury; flammatory disease; rheumatoid an

NOGO;

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Human

substrate

sequence entry)

20-MAY-2004

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Best Local S
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase ox protein kinase PKR genes, for treating cancer and inflammatory disease.
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                          Human PKR
                                                                                                                                                                                      ADL50201 standard;
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12; Conserv
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2001US-0294412P.
2001US-0315315P.
                                                                                                                           (first
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                                                                                                                                                                                     RNA;
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                                                                                                                         entry)
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Pred.
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    arthritis;
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protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal melanoma; lymphoma; glioma; inflammatory disease;

cord injury; cancer;
rheumatoid arthritis;

IKK;

prostaglandin D2

receptor;

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RESULT 1917
ADL49951
ID ADL4995
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                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                  Human PKR substrate sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17
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                   antisense oligonucleotide;
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Best Local
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prostaglandin D2 receptor; PIGUK; LAGEPGE A..................
protein kinase PKR; cerebrovascular accident;
central nervous system injury; CNS injury; spinal cord injury; cancer;
central nervous aystem injury; inflammatory disease; rheumatoid arthritis
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                              antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
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Pred. No. 1.
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Matches 12
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CMS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis

arthritis;

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RESULT 1920
ADL50198
ID ADL5019
XX
ADL5019
XC ADL5019
XC ADL5019
DT 20-MAY-
XX
DE Human F
XX
KW antisen
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KW protein
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Best Local S
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                             for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR). IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR contents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                restenosis; asthma; Crohn' autoimmune disease; lupus; graft rejection; ischaemia allergy; asthma; allergic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                              Human PKR substrate sequence #1312.
                                                                                                                                                                                            ADL50198 standard; RNA; 17
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se; lupus; multiple sclerosis; transplant rejection;
ischaemia; reperfusion; glomerulonephritis; sepsis;
allergic rhinitis; atopic dermatitis; human PKR;
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tor (PTGDR),
      arthritis;
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Human PKR

substrate

sequence

#1532.

(first entry)

prostaglandin D2 protein kinase Pr central nervous s

se oligonucleotide; neurite growth inhibitor; Nandin D2 receptor; PTGDR; IKappaB kinase; IKK; kinase PKR; cerebrovascular accident; nervous system injury; CNS injury; spinal cord a; lymphoma; glioma; inflammatory disease; rheuma;

cord injury; cancer;
rheumatoid arthritis;

NOGO;

antisense oligonucleotide;

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672 \vdash

GGCTCACTGCAACCTCT 688

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GGCUCACUGCAACUUCU

17

RESULT 1921 ADL50418

standard; RNA; 17

ADLS0418 ADL50418

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The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor cC for a neurite growth inhibitor, NoGO, prostaglandin D2 receptor (PTGDR), CC lkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the CC invention are useful for treating: cerebrovascular accident, central CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune CC disease, lugus, multiple sclerosis, transplant/graft rejection, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The CC cucleic acids of the invention are also useful for down-regulating the CC expression of a target gene and as a diagnostic tool to examine genetic CC drifts and mutations within diseased cells or to detect the presence of a CC curve of the complex of the invention are also useful for down-regulating the CC content of the complex of the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR curvers a security of the content of the curvers of the content of the cont
Matches
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein kinase PKR genes, for treating cancer
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                                                                                                                                                                Sequence 17
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l Similarity
12; Conserv
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                                                                                                                                                                         BP; 3 A;
Conservative
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                                                                                                                                                                         6 C; 3
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4.
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RESULT 1922
ADL4993
ID ADL4993
XX
AC ADL4993
XX
DT 20-MAY-
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DT Human P
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M antisen
KW prostag
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that down regulate the expression or inhibit the function of a receptor
for a neurite growth inhibitor, NCGO, prostaglandin D2 receptor (PTGR),
C IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
invention are useful for treating: cerebrovascullar accident, central
rervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
c lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
c restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
disease, lupus, multiple sclerosis, transplant/graft rejection,
c ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
c conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
nucleic acids of the invention are also useful for down-regulating the
c expression of a target gene and as a diagnostic tool to examine genetic
drifts and mutations within diseased cells or to detect the presence of a
target RNA in a cell. The present RNA sequence represents a human PKR
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascullar accident; central nervous system injury; CNS injury; spinal cord inj
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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9; Conserv
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                                                                                                         substrate sequence #1044.
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                                                                                                                                                                                                                     RNA;
                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
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 cord injury; cancer;
rheumatoid arthritis;
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29-MAY-2001;
28-AUG-2001;
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury melanoma; lymphoma; glioma; inflammatory disease; rheumatoid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein kinase PKR genes,
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                                                                                                         Human PKR
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                                                                                                                                            20-MAY-2004
                                                                                                                                                                               ADL50731;
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h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
in kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                   standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence.
                                                                                                           substrate
                                                                                                                                                                                                                                                                                                                                                                              Conservative
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2001US-0294412P.
2001US-0315315P.
                                                                                                                                            (first entry)
                                                                                                                                                                                                                   RNA;
                                                                                                         sequence
                                                                                                                                                                                                                                                                                                                                                                                               76.5%;
                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
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                                                                                                           #1845
                                                                                                                                                                                                                                                                                                                                                                                               Score 15.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 17;
                  spinal cord injury; cancer;
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arthritis

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RESULT 1924
ADL49907
ID ADL4990
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AC ADL4990
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Icor a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lugus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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     antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                            Human PKR substrate
                                                                                                                                                                                                                                                                                                                                               ADL49907 standard; RNA; 17
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12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   comprises nucleic acids (e.g. antisense oligonulate the expression or inhibit the function of
                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ID NO 4264; 317pp; English.
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                                                                                                                                                                            sequence #1021.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G; 0 T; 4 U;
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Pred. No. 1
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tor (PTGDR),
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The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC (RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC (1ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC current scand mutations within diseased cells or to detect the presence of a
CC current scandard.
CC current scandard.
                                                                                                                                                                                                                                                                                                                                                                                            Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase of protein kinase PKR genes, for treating cancer and inflammatory disease
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                                                                                                                                                                                                                                                                        protein kinase PKR genes, for treating cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 3440; 317pp; English.
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Sequence 17 BP; 2 A; ű c; 6 G; 0 T; 4 U; 0 Other;

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Query Match
Best Local
l Similarity
12; Conserv
Conservative
       70.6%;
4;
        Score 15.4;
Pred. No. 1
Mismatches
        .6e+03
                 DB
                1;
                Length 17;
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antisense oligonucleotide; neurite growth inhibitor; N
prostaglandin D2 receptor; PTGDR; KappaB kinase; IKK;
protein kinase PKR; cerebrovascular accident;
central nervous system injury; CNS injury; spinal cord
melanoma; lymphoma; glioma; inflammatory disease; rheu
                                                                     Human PKR
                                                                                             20-MAY-2004
                                                                                                                                          ADL50203
                                                                                                                   ADL50203
                                                                                                                                                                                                                            937
                                                                                                                                          standard; RNA; 17
                                                                                                                                                                                                                   CTGTTACCCAGGCTGGA
                                                                                                                                                                                                     CUGUUGCCCAGGCUGGA
                                                                      substrate
                                                                                             (first
                                                                     веquence
                                                                                             entry)
                                                                                                                                                                                                     17
                                                                                                                                                                                                                            953
                                                                      #1317.
  cord injury; cancer; rheumatoid arthritis;
                                                NOGO;
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Crohn's disease; diabetes;

obesity;

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RESULT 1926
ADL50749
ID ADL5074
XX
AC ADL5074
XC ADL5074
XX
DT 20-MAY-
DT 20-MAY-
CX
DE Human F
XX
M antiser
KW prostag
KW proteir
KW central
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                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), I RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, 1 ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR cubstrate segmence.
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Best Local S
Matches 13
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graft rejection; ischaemia; reperfusion; glomerulonephritis;
allergy; asthma; allergic rhinitis; atopic dermatitis; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  restenosis; asthma; autoimmune disease;
          protein kinase PKR; cereprovas central nervous system injury;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                  antisense oligonucleotide; neurite growth inhibitor; NOGO;
prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein kinase PKR genes, for treating cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-058513/05.
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                                                                                                                                                                                                      ADL50749 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           substrate sequence.
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                                                                                                                                                                                                                                                                                                                                                         13;
kinase PKR; cerebrovascular accident;
nervous system injury; CNS injury; spinal
a; lymphoma; glioma; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                       CUGCCUCAGCCUCCUGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chowrira B,
                                                                                                   substrate sequence #1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 3736; 317pp; English.
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                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                      RNA;
                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                       1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                          C; 3 G; 0 T; 4 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                       Score 15.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                         .6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
 cord injury; cancer;
rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inflammatory disease.
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is; sepsis;
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RESULT 1927
ADL49908
ID ADL4990
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DT 20-MAY-
DX Human E
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KW antiser
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Best Local (
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29-MAY-2001;
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protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid an
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 6 A;
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                                                prostaglandin D2 receptor;
                                                                   antisense
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                                               oligonucleotide; neurite growth inhibitor; Nordin D2 receptor; PTGDR; IkappaB kinase; IKK;
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2001US-0294412P.
2001US-0315315P.
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inflammatory disease.
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arthritis;

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   that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), (IkappaB kinase (IKK), or protein kinase PKR The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, (Iymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, crestenosis or asthma), Crohm's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, cischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR
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Best Local 9
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
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t down regulate the expression or inhibit the function of a receptor
a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
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12; Conser
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                                                                                                    substrate sequence #1327.
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; 2001US-0294412P.
; 2001US-0315315P.
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Pred. No. 1.6e
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      arthritis;
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The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IRappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC restenosis or asthma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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sequence.
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Sequence 17 BP; 2 P 5 C; 6 G; 0 T; 4 U; 0 Other;

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Query Match Best Local Matches 197 12; Similarity CCATGTTGGTCAGGCTG Conservative :: 1.6%; 213 4. Score 15.4; Pred. No. 1 Mismatches 1.6e+03; DB 1; Length 17; Indels 0 Gaps 0

ADL50738 standard; RNA; 17 밁 S

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CCAUGUUGGCCAGGCUG

17

Human PKR substrate sequence #1852.

(first

entry)

ADL50738
ID ADL:
XX
AC ADL:
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DT 20-1
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EM ant
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XM mell prostaglandin Dz receptor; PTGDR; IkappaB kinase; prostaglandin Dz receptor; PTGDR; IkappaB kinase; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal melanoma; lymphoma; glioma; inflammatory disease; antisense oligonucleotide; neurite growth inhibitor; kinase; IK cord injury; rheumatoid ar IKK; NOGO

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ADL50212
ID ADL5021
XX
AC ADL5021
XX
AC ADL5021
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DT 20-MAY-
DX Human P
XX
EW prostag
KW prostag
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord inj melanoma; lymphoma; glioma; inflammatory disease; rheumato
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GUUCAAGUGAUUĆUĆĆU 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                       RNA; 17
                                                                                                                                                                                                sequence
                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.6%;
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                                                                                                                                                                                                                                                                                                                                                                                       ВÞ
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7; Mismatches
                                                                                                                                                                                                #1326.
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Pred. No. 1.6e+03;
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      cord injury; cancer;
rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tor, IkappaB kinase or inflammatory disease.
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RESULT 1931
ADL49917
ID ADL4991
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AC ADL4991
XX
DT 20-MAY-
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DT 20-MAY-
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DT 20-MAY-
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DT 20-MAY-
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W antiser
KW prosta;
KW prosta;
KW central
KW melanor
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Best Local
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 59; SEQ ID NO 3745; 317pp; English.
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                                                                      antisense
                                                                                                                                           20-MAY-2004
                                                                                                                                                                                                              ADL49917 standard;
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                                                oligonucleotide; neurite growth inhibitor;
ndin D2 receptor; PTGDR; IkappaB kinase; IK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence.
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2001US-0294412P.
2001US-0315315P.
                                                                                                                                           (first
                                                                                                                                                                                                              RNA; 17
                                                                                                         sequence
                                                                                                                                           entry)
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Pred. No. 1.
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nes 1;
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prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
protein kinase PKR; cerebrovascular accident;
central nervous system injury; CNS injury; spinal cord injury; cancer;

lymphoma; glioma;

inflammatory

disease; rheumatoid

arthritis,

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RESULT 1932
ADL49926
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                         ADL49926 standard; RNA; 17
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12; Conser
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                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                sequence #1040.
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Pred. No. 1.6e
4; Mismatches
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on or inhibit the function of
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                                                                                                                                                                                                                                                                                                                                                                                                       Other;
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        arthritis
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The invention comprises nucleic acids (e.g. antisense oligonucleotides) cc that down regulate the expression or inhibit the function of a receptor cc for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), cc [RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the ci invention are useful for treating: cerébrovascular accident, central cc nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, cc gribona), inflammatory disease (e.g. rheumatoid arthritis, cc restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune cc disease, lupus, multiple sclerosis, transplant/graft rejection, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The cc conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The cc cucleic acids of the invention are also useful for down-regulating the cc expression of a target gene and as a diagnostic tool to examine genetic cultifis and mutations within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR contacts.
                                                                                                                                                                                                                                                                                                                                                                                                           Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
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29-MAY-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RIBOZYME PHARM
                                    sequence.
                                                                                                                                                                                                                                                                                                                                                                        SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; 2001US-00827395.
; 2001US-0294412P.
; 2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                        NO 3459;
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                                                                                                                                                                                                                                                                                                                                                                        317pp; English.
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Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; ம **G**; 0 Other;

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Matches 1006 GATTCTCCTGTCTCAGC 11; Similarity Conservative 1.6%; 1022 <u>ت</u> Score 15.4; Pred. No. 1 Mismatches .6e+03 DB 1; Length 17; Indels 0 Gaps 0

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ADL49965 Human PKR 20-MAY-2004 ADL49965 Н GAUUCUCCUGCCUCAGC standard; RNA; 17 substrate (first sequence #1079. entry) 17 ВP

EXAXEXEXEXEXE E antisense ouryenver-prostaglandin D2 receptor; PTGDR; IKappas nemerical protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal central nervous system injury; CNS injury; spinal oligonucleotide; neurite growth PTGDR; IkappaB inhibitor; N kinase; IKK; cord injury; cancer;
rheumatoid arthritis; NOGO,

restenosis; asthma;

Crohn's disease; diabetes; obesity;

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RESULT 1934
ADL50214
ID ADL5021
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AC ADL5021
XC ADL5021
XX
DT 20-MAY-
DT 20-MAY-
XX
DT Human F
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W antiser
KW prostag
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Matches 13
antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord inj melanoma; lymphoma; glioma; inflammatory disease; rheumato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune disease; lupus; multiple sclerosis; transplant rejecti graft rejection; ischaemia; reperfusion; glomerulonephritis; seps allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel enzymatic nucleic acid that down-regulates expression growth inhibitor receptor, prostaglandin D2 receptor, Ikappa protein kinase PKR genes, for treating cancer and inflammato
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-058513/05.
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29-MAY-2001; 2001US-0294412P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor that down regulate the expression or inhibit the function of a receptor (PTGDR) for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
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                                                                                                                                               20-MAY-2004
                                                                                                                                                                                                                    ADL50214 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence.
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                                                                                                             substrate
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                                                                                                                                               (first
                                                                                                                                                                                                                    RNA; 17
                                                                                                           sequence
                                                                                                                                             entry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                 76.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                   1.6%;
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3; Mismatches
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
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 cord injury; cancer;
rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cor, IkappaB kinase or
inflammatory disease.
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IkappaB kinase o
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tor (PTGDR)
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RESULT 1935 ADL50747

ADL50747 standard;

RNA;

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XXXXXXXXXXXXX

Human

substrate

sequence entry)

#1861.

20-MAY-2004 ADL50747;

(first

antisense

prostaglandin D2 receptor; PTGI protein kinase PKR; cerebrovaso central nervous system injury;

lymphoma;

glioma;

inflammatory

CNS injury; spinal cord injury; flammatory disease; rheumatoid an

arthritis

oligonucleotide; neurite growth inhibitor; ndin D2 receptor; PTGDR; IkappaB kinase; IK

NOGO;

cerebrovascular accident;

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202 TTGGTCAGGCTGGTCTC 218

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UUGGCCAGGCUGGUCUC

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that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NGG), prostaglandin D2 receptor (PTGDR), it is appeared to the motion are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, 1ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, cischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR
Matches
                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-APR-2001;
29-MAY-2001;
28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                     Sequence 17 BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                       Claim 59; SEQ ID NO 3747; 317pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                  Local
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11;
                  Similarity
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                                                                                                      sequence.
Conservative
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2001US-0294412P.
2001US-0315315P.
                1.6%;
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                                                                     G; 0 T; 5 U;
<u>ن</u>
                  Score 15.4;
Pred. No. 1
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ADL49434
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that down regulate the expression or inhibit the function of a receptor
for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR),
KappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
invention are useful for treating: cerebrovascular accident, central
rervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
the injury apinal cord injury apinal cord injury,
the injury apinal cord injury,
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29-MAY-2001;
28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase protein kinase PKR genes, for treating cancer and inflammatory disease.
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
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                                                                                                                                      Human PKR substrate sequence
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11; Conserv
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; 2001US-0294412P.
; 2001US-0315315P.
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Pred. No. 1
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         arthritis;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase ox protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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antisense oligonucleotide; neurite growth inhibitor; N prostaglandin D2 receptor; PTGDR; IKappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord melanoma; lymphoma; glioma; inflammatory disease; rheu
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                                                                                           Human PKR
                                                                                                                                                         ADL50197;
                                                                                                                                                                                         ADL50197 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17
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                                                                                                                             entry.
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Pred. No. 1.6e+03
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PKR;
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cord injury; cancer;
rheumatoid arthritis;

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RESULT 1938
ADL50748
ID ADL5074
XX
AC ADL5074
XX
DT 20-MAY-
DX
DB Human P
XX
W antisen
KW prostag
KW prostag
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Best Local S
Matches 11
antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord inj melanoma; lymphoma; glioma; inflammatory disease; rheumato
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17
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                                                                                                                                       20-MAY-2004
                                                                                                                                                                         ADL50748
                                                                                                                                                                                                         ADL50748 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    substrate sequence.
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                                                                                                     substrate sequence #1862.
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                                                                                                                                     (first
                                                                                                                                                                                                          RNA;
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Pred. No. 1
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 cord injury; cancer;
rheumatoid arthritis;
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that down regulate the expression or inhibit the function of a receptor
for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
I kappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
invention are useful for treating: cerebrovascular accident, central
nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
restenosis or asthma), Crohn's disease (e.g. rheumatoid arthritis,
classe, lupus, multiple sclerosis, transplant/graft rejection,
ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
nucleic acids of the invention are also useful for down-regulating the
expression of a target gene and as a diagnostic tool to examine genetic
drifts and mutations within diseased cells or to detect the presence of a
target RNA in a cell. The present RNA sequence represents a human PKR
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Best Local
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 59; SEQ ID NO 4281; 317pp; English.
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                                                                                         substrate
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; 2001US-0294412P.
; 2001US-0315315P.
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protein kinase PKR; cerebrovaso central nervous system injury;

glioma;

inflammatory

CNS injury; spinal cord injury; flammatory disease; rheumatoid an

NOGO

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antisense oligonucleotide; neurite growth inhibitor;
prostaglandin D2 receptor; PTGDR; IkappaB kinase; IK
protein kinase PKR; cerebrovascular accident;

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RESULT 1940
ADL49929
ID ADL4992
XX ADL4992
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XX Puman |
XX antise:
KW prosta;
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Best Local
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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     antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
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                                                                                                  Human PKR substrate sequence #1043
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                                                                                                                                                                                              standard; RNA;
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                                                                                                                                                                                                                                                                                                          TCTGTTACCCAGGCTGG
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RESULT 1941 ADL49950

ADL49950 standard; RNA; 17

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ADL49950

20-MAY-2004

(first

entry)

Human PKR

substrate sequence #1064.

prostaglandin D2 receptor; Figure, inverprostaglandin D2 receptory, Figure, increase, protein kinase PKR; cerebrovascular accident; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal central nervous system injury; CNS injury; spinal central nervous system injury; CNS injury; spinal central nervous system injury; control of the contr

cord injury; cancer;
rheumatoid arthritis;

antisense oligonucleotide;
prostaglandin D2 receptor;

neurite growth inhibitor; PTGDR; IkappaB kinase; IKI

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                                                                                                                                                                                                   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor comprises for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR), CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the comprose system (CNS) injury, spinal cordinates acident, central comprose or glioma), inflammatory disease (e.g. rheumatoid arthritis, cc restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune comprosed acident injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The concleic acids of the invention are also useful for down-regulating the compression of a target gene and as a diagnostic tool to examine genetic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The concleic acids of the invention are also useful for down-regulating the captesion of a target gene and as a diagnostic tool to examine genetic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The concleic acids of the invention are also useful for down-regulating the captes and mutations within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR
                                                                           Matches
                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-APR-2001; 2001US-00827395.
29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein kinase PKR genes, for treating cancer
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                                                                                             Local
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                                                                                                                                                      BP; 1 A;
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Crohn's disease;

diabetes;

obesity;

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RESULT 1942
ADL4943
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AC ADL4943
XC ADL4943
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DT 20-MAY-
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DT 20-MAY-
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Ct that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NCGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the cinvention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, cestenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR cushelfare segmence.
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Best Local
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protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal melanoma; lymphoma; glioma; inflammatory disease;
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              restenosis; asthma; autoimmune disease;
                                              antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   substrate; ds.
                                                                                                                         20-MAY-2004
                                                                                                                                                                                     ADL49430
                                                                                                                                                                                                                                                                                                                                                                                                                   substrate sequence.
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                                                                                                                                                                                                                                                                                             199
                                                                                              PKS
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                                                                                                                                                                                                                                                                                                                         11;
                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                           ATGTTGGTCAGGCTGGT 215
                                                                                                                                                                                                                                                                AUGUUGGCCAGGCUGGU 17
                                                                                          substrate sequence
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                                                                                                                                                                                                                                                                                                                                                                                    BP; 2 A;
                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                       (first
                                                                                                                                                                                     RNA;
                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                        1.6%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                    U; 0 Other;
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               cord injury; cancer;
   rheumatoid
                                                                                                                                                                                                                                                                                                                           Indels
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is; sepsis;
                                                                                                                                                                                                                                                                                                                         0
   arthritis;
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The invention comprises nucleic acids (e.g. antisense oligonucleotides) CC that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the convention are useful for treating: cerebrovascular accident, central convention are useful for treating: cerebrovascular accident, central conventions and glioma), inflammatory disease (e.g. rheumatoid arthritis, cc restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune conventions, conventions, conventions, conditions (e.g. asthma), crohn's disease, diabetes, obesity, autoimmune conventions, conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The curleic acids of the invention are also useful for down-regulating the convention of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-APR-2001;
29-MAY-2001;
28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejecti graft rejection; ischaemia; reperfusion; glomerulonephritis; seps allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         substrate; ds.
                                                                                                                                                                                                                                                                                                                                                                                                    Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-058513/05.
                                       substrate sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                  59; SEQ ID NO 2963; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIBOZYME PHARM INC
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2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P, Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transplant rejection; rulonephritis; sepsis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fosnaugh
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Sequence 17 BP; 3 A; 6 C; 3 G; 0 T; 5 U; 0 Other;

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Query Match Best Local S Matches 11 701 CAAGTTATTCTCCTGCC 717 11; Similarity Conservative 1.6%; 64.7%; 5 Score 15.4; Pred. No. 1 ed. No. 1.6e+03 Mismatches DB 1; 1: Length 17; Indels ٥, Gaps 0

RESULT 1943 ADH54043/c ID ADH5404 ADH54043 standard; CAAGUGAUUCUCCUGCC DNA; 17 17

25-MAR-2004 (first entry)

ADH54043;

Human neurodegenerative disease-related sequencing primer SeqID170

human; neurodegenerative disease; urokinase plasminogen activator; uPA; gamma-synuclein; SNCG; insulin degrading enzyme; IDA; kinesin-like protein 1; KNSLI; lysosomal acid lipase; LIPA; tumour necrosis factor receptor SF6; TNFRSF6; Alzheimer's disease; PCR;

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RESULT 1944
ADK13186/c
ID ADK13186 standard; DNA; 17 BE
XX
AC ADK13186;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human glioma endothelial mar)
XX
Glioma; brain tissue; neoplar
XX
W glioma; brain tissue; immu
XX
W multi-drug sensitive glioma;
XX
OS Homo sapiens.
OS Synthetic.
XX
PN W02004016758-A2.
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Best Local S
Matches 16
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08-NOV-2001; 2001US-0336929P.
08-NOV-2001; 2001US-0338010P.
09-NOV-2001; 2001US-0338363P.
04-DEC-2001; 2001US-0337052P.
28-MAR-2002; 2002US-0368919P.
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25-OCT-2001;
02-NOV-2001;
08-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention relates to a novel method of determining a predisposition for or the occurrence of neurodegenerative disease comprising detecting in a target nucleic acid obtained from the subject the presence of an allelic variant of polymorphic regions of human genes selected from urokinase plasminogen activator (uph), gamma-synuclein (SNCG), insulin degrading enzyme (IDE), kinesin-like protein 1 (KNSL1), lysosomal acid lipase (LIPA) and tumour necrosis factor receptor SF6 (TNFRSF6). The method is useful in determining the presence or predisposition to a neurodegenerative disease, particularly Alzheimer's disease. The present sequence is that of a sequencing primer which was used for sequencing of a region of the human IDE gene in the exemplification of the invention.
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Bertram L,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Determining a predisposition for or the occurrence of neurodegenerative disease, particularly Alzheimer's disease, comprises determining the presence of a polymorphism in the uPA, SNCG, IDE, KNSL1, LIPA or TNFRSF6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example
                                                                                               glioma; brain tissue; neoplastic; glioma endothelial marker; GEM;
anticancer; antiglioma; immune response; cytostatic;
                                                                                                                                             Human glioma endothelial marker (GEM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GEHO ) GEN
                                                                                 multi-drug sensitive glioma;
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2001US-0348065P.
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Mullin KM, Sampson
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Pred. No. 1.
                                                                                  human; long
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                                                                                                                                             long tag SEQ ID NO:364
                                                                                                                                                                                                                                                                                                                                                                                               .6e+03;
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RESULT 1945
ADL82347/c
ID ADL8234
XX ADL8234
AC ADL8234
XX ZO-MAY-
XX ZO-MAY-
XX ZO-MAY-
XX ZO-MAY-
XX ZO-MAY-
XX ZO-MAY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC gene (I) in a first brain tissue sample (T) suspected of being CC gene (I) in a first brain tissue sample (T) suspected of being CC endothelial markers (GEMS)) as given in specification, and comparing the CC expression of (I) in (T) with expression of (I) in second normal brain CC tissue sample (R), where increased expression of (I) in (T) relative to CC (R), identifies (T) as likely to be neoplastic. Also described: (I) CC treating (M2) glioma involves contacting cells of the glioma with an CC identifying (M3) a test compound as potential anticancer or antiglioma (I), monitoring an expression product of the at least one gene and CC (I), monitoring an expression product of the at least one gene and CC identifying test compound as a potential anticancer drug if it decreases the expression of at least one gene; (3) identifying (M4) a test compound CC as potential anticancer or antiglioma drug involves contacting a test compound contacting at least one gene and CC identifying the test compound as a potential anticancer drug if it decreases the expression of at least one gene; and (M4) a test compound with the cell which expresses mRNA of at least one gene and identifying the test compound as a potential anticancer drug if it decreases the expression of at least one gene; and (4) inducing (M5) an immune response to glioma involves administering to a mammal, a protein CC information of glioma cells, and as immune response inducers. (M1) is useful for aiding in diagnosing glioma. (M2) is useful for treating multi carries of the glioma at a mammal having glioma or in a mammal who has had a glioma surgicially removed. The present sequence represents a human GEM long tag oligonucleotide, which is used in the exemplification of the
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Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Diagnosing glioma by detecting expression product of any one of 255 genes, glioma endothelial markers, in brain tissue sample suspected of being neoplastic, and comparing the expression with expression in normal brain tissue sample.
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01-APR-2003; 2003US-0458978P.
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UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                     standard; DNA; 17
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0; Mismatches
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least one
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Human ER+ 20-MAY-2004

(first entry)

breast cancer differentially expressed sequence #317

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ADL82349/c
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a composition which contains at least one vector (B) containing a nucleic acid (I) associated with breast cancer. The vector (B), also polypeptides (II) encoded by (I), are used for treatment of breast cancer. Arrays based on (I), (II), or their fragments, and (II) specific antibodies (Ab) are used to predict characteristics (e.g. invasiveness or stage) of breast cancer, and (I), or its fragments, are used to modulate characteristics of such cells; to identify breast cancer genes and to detect breast cancer (by detecting polymorphic nucleic acid or its products). The present sequence represents a human ER+ breast cancer differentially expressed sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goodman LJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JAN-2002; 2002US-0348053P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-JAN-2003; 2003US-00339782
WPI; 2004-069003/07.
                       Goodman LJ,
                                                                                                                                                                                                 gene therapy;
                                                                                                                                                                                                                                                                             ADL82349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 318; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treating,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003166026-A1
                                                (LYNX-) LYNX THERAPEUTICS INC
                                                                                                08-JAN-2003; 2003US-00339782
                                                                                                                         04-SEP-2003
                                                                                                                                                 US2003166026-A1
                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                          Human ER+ breast cancer differentially expressed sequence #319
                                                                                                                                                                                                                                                   20-MAY-2004
                                                                                                                                                                                                                                                                                                   ADL82349 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LYNX-) LYNX THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2004-069003/07
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                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      containing nucleic acid associated with breast cancer, useful ng, diagnosing and characterizing breast cancer, also related ptides and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                  CCCGACCTCAGGTGATC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bowen BA
                       Bowen BA;
                                                                         2002US-0348053P.
                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ds;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         breast cancer; human;
                                                                                                                                                                                                  breast cancer; human;
                                                                                                                                                                                                                                                                                                 DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                           1.6%;
                                                                                                                                                                                                                                                   entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.4;
Pred. No. 1
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                                                                                                                                                                                                  ER+ breast cancer
                                                                                                                                                                                                                                                                                                                                                                                                                            .6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         breast cancer.
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RESULT 1947
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a composition which contains at least one vector (B) containing a nucleic acid (I) associated with breast cancer. The vector (B) also polypeptides (II) associated by (I), are used for treatment of breast cancer. Arrays based on (I), (II), or their fragments, and (II) -specific antibodies (Ab) are used to predict characteristics (e.g. invasiveness or stage) of breast cancer, and (I), or its fragments, are used to modulate characteristics of such cells; to identify breast cancer genes and to detect breast cancer (by detecting polymorphic nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vector containing nucleic acid associated with treating, diagnosing and characterizing breast polypeptides and antibodies.
          The invention relates to a composition which contains at least one vector (B) containing a nucleic acid (I) associated with breast cancer. The vector (B), also polypeptides (II) encoded by (I), are used for treatment of breast cancer. Arrays based on (I) (II), or their fragments, and (II) specific antibodies (Ab) are used to predict characteristics (e.g. invasiveness or stage) of breast cancer, and (I), or its fragments, are used to modulate characteristics of such cells; to identify breast cancer genes and to detect breast cancer (by detecting polymorphic nucleic acid or its products). The present sequence represents a human ER+ breast
 or its products). The cancer differentially
                                                                                                                                                                                                                                      Vector containing nucleic acid associated with breast cancer, useful treating, diagnosing and characterizing breast cancer, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL82453 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or its products). The present sequence represents a human ER+ breast cancer differentially expressed sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 320; 61pp; English.
                                                                                                                                                                                                                   treating, diagnosing and characterizing polypeptides and antibodies.
                                                                                                                                                                                                                                                                                                                          Goodman
                                                                                                                                                                                                                                                                                                                                                                                        09-JAN-2002; 2002US-0348053P
                                                                                                                                                                                                                                                                                                                                                                                                                           08-JAN-2003; 2003US-00339782.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human ER+ breast
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                                                                                                                                                                                   Claim 1; SEQ ID NO 424; 61pp; English.
                                                                                                                                                                                                                                                                                     WPI; 2004-069003/07.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              breast cancer;
The present sequence re
ally expressed sequence.
                                                                                                                                                                                                                                                                                                                        BA;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               expressed sequence
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Matches 16
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                                                                                                                    The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV;GPVI) DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           breast cancer; cytostatic; gene therapy; GP6; GPIV; GPVI; chromosome 19q13.4; ss; single nucleotide polymorphism.
                                                                                                                                                                                                                                                                                        Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                       25-NOV-2002;
24-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADP08740 standard;
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                                                                                               Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                             WPI; 2004-441082/41.
                                                                                                                                                                                                                                                                 Example 3; Page 83; 286pp; English
                                                                                                                                                                                                                                                                                                                                                                      RB,
                       391
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16; Conserv
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                                                  16;
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                                                                                                                                                                                                                                                                                                                                                                                               SEQUENOM INC.
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                         AGTGCTGGGATTACAGG 407
                                                                                                                                                                                                                                                                                                                                                                     Nelson MR,
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                                                  Conservative
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2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                              94.1%;
                                                                        1.6%;
                                                                                                                                                                                                                                                                                                                                                                      Braun
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                                                           Score
Pred.
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Pred. No. 1.6e+03;
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                                                  Mismatches
                                                              No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; platelet glycoprotein VI;
PCR; primer; SNP;
                                                                                                                                                                                                                                                                                                                                                                       SM,
                                                              .6e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                                                           DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    breast cancer; cytostatic; gene therapy; human; chromogranin B; secretogranin 1; SCG1; chromosome 20pter-p12; ss; PCR; primer; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Identifying a subject at risk of breast cancer by detecting the or absence of one or more nucleotide polymorphic variations, use diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
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                                                      breast cancer; cytostatic; gene therapy; human; chromogranin B; secretogranin 1; SCG1; chromosome 20pter-p12; ss; PCR; primer; 
                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; Page 102; 286pp; English.
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24-JUL-2003; 2003US-0490234P
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                                       single
                                                                                                 Extend
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                                                                                                                                                      ADP09278;
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                                                                                                                                                                                                                                                                                                              16;
                                         nucleotide
                                                                                               primer
                                                                                                                                                                                                                                                                                                                                                                                                  DNA which
                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                           (first
                                                                                                 73 used to genotype human chromogranin B polymorphism.
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                                         polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                  is located at chromosomal position
                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                           1.6%;
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Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                           Length 17;
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                                                                                                                                                                                                                                                                                                                                                                                                     20pter-p12
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                                                         primer; SNP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     useful for
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Homo sapiens

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RESULT 1951
ADP08765
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human chromogranin B (CHGB;secretogranin 1;SCG1) DNA which is located at chromosomal position 20pter-p12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                 breast cancer; cytostatic; gene therapy; GP6; GPIV; GPVI; chromosome 19q13.4; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 5 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-441082/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
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                                                                               25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
                                                                                                                       25-NOV-2003; 2003WO-US037966.
                                                                                                                                                    10-JUN-2004
                                                                                                                                                                                WO2004047767-A2
                                                                                                                                                                                                                                                                                          Extend
                                                                                                                                                                                                                                                                                                                    26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                           ADP08765 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; Page 103; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-NOV-2003; 2003WO-US037966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           966
                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                                  nucleotide polymorphism.
                                                                                                                                                                                                                                                                                        primer 102 used to genotype human
                                                     SEQUENOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGATTACAGGCGTGA 882
                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGATTACAGGCGTTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nelson MR,
                         Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                     INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.6%;
                           Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Braun
                                                                                                                                                                                                                                                                                                                                                                             ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.4; DB 1;
Pred. No. 1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kammerer
                           Kammerer
                                                                                                                                                                                                                                                 human; platelet glycoprotein VI; PCR; primer; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SM,
                                                                                                                                                                                                                                                                                         glycoprotein VI polymorphism
                           , MS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
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                           Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
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AGCTGGGATTACAGGCA 17

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Matches
                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                 as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV,GPVI) DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                                                                                                           of breast cancer which comprises detecting the presence or absence of or or more polymorphic variations associated with breast cancer in a nucle acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer,
                                                                                                                                                                                                          Sequence 17 BP; 5 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a novel method for identifying a subject at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; Page 84; 286pp; English.
1032 AGCTGGGATTACGGGCA 1048
                                                                                 16;
                                                                                    Conservative
                                                                                                           1.6%;
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                                                                                                               Score 15.4; DB 1; Pred. No. 1.6e+03;
                                                                                 Mismatches
                                                                                                                                               DB 1;
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                                                                                    Indels
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                                                                                    Gaps
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RESULT 1952
ADO80011
                                                                                                                                                                                                   Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPF CENPC1; SNP; single nucleotide polymorphism; centromere protein C1; Centromere autoantigen C1; chromosome 4q12-q13.3; extend; primer; s
                                                                                                       WO2004047514-A2
                                                                                                                                                                                                                                                                                                                                                             26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADO80011 standard; DNA; 17
25-NOV-2003; 2003WO-US037943.
                                                                                                                                                                                                                                                                                                             CENPC1
                                                                                                                                                                                                                                                                                                                                                                                                                  AD080011;
                                                    10-JUN-2004.
                                                                                                                                                                                                                                                                                                             extend
                                                                                                                                                                                                                                                                                                             primer
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25-NOV-2002; 2002US-0429136P 24-JUL-2003; 2003US-0490234P

RВ, Nelson MR, Braun A, Kammerer SM,

₽ };

(SEQU-) SEQUENOM INC

Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the DLG1, KIAAO783, DPF3 or CENPC1 regions which are associated with breast cancer in a nucleic acid sample from a

Example 6, Page 91; 227pp; English.

The present invention relates to a method for identifying a subject at risk of breast cancer. The method comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The nucleic acid sample comprises the DLGI region (ADO79402), KIAA0783 region (ADO79403), DPF3 region (ADO79404) or CENPC1 region (ADO79405). The gene DLGI (discs,

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ADO79480
ADO79480
ADO7
XX
AC
ADO7
XX
CYC
CYC
KW CYC
KW CYC
KW Synin
KW Synin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC large homolog 1 (Drosophila)) is also known as synapse-associated protein CC 97, hdlg or SAP97. DLG1 has been mapped to chromosomal position 3ç29. The CC gene KIAA0783 is also known as PHF14 and PHD finger protein 14. KIAA0783 CC has been mapped to chromosomal position 7p21.3. The KIAA0783 protein is a CC novel gene with unknown function, however, being a zinc finger protein, CC it likely to be a transcription factor. The gene DPF3 D4, zinc and CC double PHD fingers, family 3) is also known as CERD4, cer-d4, FLJ14079 CC and 2810403B03Rik. DPF3 is a Rho family guanine-nucleotide exchange CC factor. DPF3 has been mapped to chromosomal position 14q24.3-q31.1. The CENPC1 (centromere protein C1) is also known as Centromere CC q13.3. CENPC1 is a centromere autoantigen and a component of the inner CC kinetochore plate. The CENPC1 protein is required for maintaining proper CC kinetochore size and a timely transition to anaphase. The method is CC useful for identifying a subject at risk of breast cancer, for early CC useful to a response to a breast cancer treatment, and in clinical drug trials. The present sequence was used in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1953
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPF3; CENPC1; SNP; single nucleotide polymorphism; synapse-associated protein 97; hdlg; SAP97; chromosome 3q29; extend;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DLG1 extend
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-AUG-2004
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24-JUL-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-441037/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SEQU-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RB,
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16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTGCTGGGATTACA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0429136P.
2003US-0490234P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kammerer SM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Reneland
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The present invention relates to a method for identifying a subject risk of breast cancer. The method comprising detecting the presence absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The nucleic acid sample from a subject.

sample or

The present invention relates to a method for identifying a subject risk of breast cancer. The method comprising detecting the presence absence of one or more polymorphic variations associated with breast

or

Example

6

Page 91;

227pp;

English.

Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the DLG1, KIAA0783, DPF3 or CENPC1 regions which are associated with breast cancer in a nucleic acid sample from a

Example 3;

Page

73;

227pp; English.

Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the DLG1, KIAA0783, DPF3 or CENPC1 regions which are associated with breast cancer in a nucleic acid sample from a

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RESULT 1954
ADO80017
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC comprises the DLG1 region (ADO79402), KIAAO783 region (ADO79403), DPF3
CC region (ADO79404) or CENPC1 region (ADO79405). The gene DLG1 (discs, CC large homolog 1 (Drosophila)) is also known as synapse-associated protein CC 97, hdlg or SAP97. DLG1 has been mapped to chromosomal position 3029. The CC gene KIAAO783 is also known as PHF14 and PHD finger protein 14. KIAAO783 (C novel gene with unknown function, however, being a zinc finger protein, is a CC novel gene with unknown function, however, being a zinc finger protein, CC double PHD fingers, family 3) is also known as CERD4, cer-d4, FLJ14079 (C double PHD fingers, family 3) is also known as CERD4, cer-d4, FLJ14079 (C gene CENPC1 (centromere protein C1) is also known as CERD4, cer-d4, FLJ14079 (C gene CENPC1 fis a centromere autoantigen and a component of the inner CC suscentiate of the centromere autoantigen and a component of the inner CC kinetochore plate. The CENPC1 protein is required for maintaining proper Kinetochore size and a timely transition to anabhase. The method is C useful for identifying a subject at risk of breast cancer, for early CC diagnosis, prevention and treatment of breast cancer, to analyze and CC predict a response to a breast cancer treatment, and in clinical drug trials. The present sequence was used in an example from the invention.
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPF3; CENPC1; SNP; single nucleotide polymorphism; centromere protein C1; Centromere autoantigen C1; chromosome 4q12-q13.3; extend; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17
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                                                                                                                                                                WPI; 2004-441037/41.
                                                                                                                                                                                              Roth
                                                                                                                                                                                                                                                     25-NOV-2002;
24-JUL-2003;
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                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CENPC1 extend primer
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                                                                                                                                                                                                                          (SEQU-) SEQUENOM INC
                                                                                                                                                                                              RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        877 GCGTGAGCCACCACGCC 893
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGTGAGCCACCACACC
                                                                                                                                                                                            Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 4 A; 8 C; 4 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                       2002US-0429136P
2003US-0490234P
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                                                                                                                                                                                               Kammerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No. 1.6e+03
                                                                                                                                                                                               MS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                               Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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RESULT 1955
AAQ20109
ID AAQ2010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC cancer in a nucleic acid sample from a subject. The nucleic acid sample comprises the DLG1 region (AD079402), KIAA0783 region (AD079403), DPF3 CC region (AD079404) or CENPC1 region (AD079405). The gene DLG1 (discs, CC large homolog 1 (Drosophila)) is also known as synapse-associated protein CC gene KIAA0783 is also known as BPF14 and PHD finger protein 14. KIAA0783 (CC has been mapped to chromosomal position 7921.3. The KIAA0783 protein is a convel gene with unknown function, however, being a zinc finger protein, CC it likely to be a transcription factor. The gene DPF3 (D4, zinc and CC double PHD fingers, family 3) is also known as CERD4, cer-d4, FLJ14079 (CC factor. DPF3 has been mapped to chromosomal position 14024.3-q31.1. The CENPC1 (centromere protein C1) is also known as Centromere CC q13.3. CENPC1 has been mapped to chromosomal position 14024.3-q31.1. The CC q13.3. CENPC1 is a Centromere protein C1 is also known as Centromere CC kinetochore plate. The CENPC1 protein is required for maintaining proper CC kinetochore size and a timely transition to anaphase. The method is useful for identifying a subject at risk of breast cancer, for early CC diagnosis, prevention and treatment of breast cancer, to analyze and CC predict a response to a breast cancer treatment, and in clinical drug crials. The present sequence was used in an example from the invention.
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                deoxyribonucleic acid; major groove; ethanoamino group; tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine; cross-linking group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ20109 standard;
WPI; 1992-007480/01.
                                                                                              25-MAY-1990;
14-JAN-1991;
                                                                                                                                                                                                                                                                                        modified_base
                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cross-linking oligomer 943 to target human TNF Receptor mRNA.
                               Matteucci MD,
                                                                                                                                              25-MAY-1990;
                                                                                                                                                                            12-DEC-1991.
                                                                                                                                                                                                            WO9118997-A.
                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                               (GILE-) GILEAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             871 TTACAGGCGTGAGCCAC 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTACAGGTGTGAGCCAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                               Krawczyk S;
                                                                SCIE INC
                                                                                              90US-00529346.
91US-00640654.
                                                                                                                                              90US-00529346
                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "N-methyl-8-oxo-2'-deoxyadenine"
18
                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                    *tag= p
/mod_base= OTHER
                                                                                                                                                                                                                                          note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.6%;
                                                                                                                                                                                                                                          "N4N4-ethanocytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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RESULT 1956
AAQ30448
ID AAQ3044
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Best Local Similarity
Matches 16; Conserva
                                                                                                                           23-NOV-1990;
18-JAN-1991;
08-APR-1991;
17-APR-1991;
17-APR-1991;
17-APR-1991;
27-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The oligomer was designed to target human TNF receptor mRNA beginning at nucleotide 2354 and to covalently cross-link to the target via the N4N4-ethanocytosine group. See also \lambda\lambda 220108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
07-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ30448 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New sequence-specific non-photo-activated crosslinking agents -
the major groove of duplex DNA and are esp. useful for treating
                New oligomers contg. modified bases - which form a triplex with doublet in a DNA duplex, for treating and diagnosing HIV, hepatiherpes malignancy and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                           Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV; HPV; malignancy; hepatitis; inflammation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligomer TNFR943 for forming triplex with HUMNFR target duplex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ30448;
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                                                                                                                                                                                                                  25-NOV-1991;
                                                                                                                                                                                                                                      11-JUN-1992.
                                                                                                                                                                                                                                                            WO9209705-A1
                                                                                                                                                                                                                                                                                                              modified_base
                                                                                  Froehler B,
                                                                                                                                                                                                                                                                                                                                                        modified_base
                                                             WPI; 1992-217083/26.
                                                                                                      (GILE-) GILEAD
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                                                                                  Krawczyk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                            90US-00617907.
91US-00643382.
91US-00683420.
91US-00686544.
                                                                                                        SCI INC
                                                                                                                                        91US-00686546.
91US-00686547.
                                                                                                                                                                                                                  91WO-US008811
                                                                                                                             91US-00766733
                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "N6 methyl-8-oxo-2'
18
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/mod_ba
                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "OTHER= N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.6%;
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                                                                                    Matteucci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                   N4
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                                                                                   Milligan
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                                                                                                                                                                                                                                                                                                                             deoxyadenine"
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Claim 12; Page 72; 77pp; English

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RESULT 1957
AAZZ1792/c
ID AAZZ1792/c
ID AAZZ179
XX AAZZ179
XX AAZZ179
XX O1-DEC-
XX Neoplas
XX UyJo)
XX Detect
PT With ci
XX Detect
PT With ci
XX Detect
PT With ci
XX Detect
CC Oncoge
CC Oncoge
CC Gesaliva
CC Subjec
CC Subjec
CC Gran
CC Cremopl
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The synthetic oligomer is capable of forming a triplex at physiological pH with a purine rich target sequence by coupling into the major groove of the duplex. The specific target sequence of this oligomer is the human rumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg. a purine rich sequence concd. on one strand of the duplex. The oligomer, and others like it are useful in diagnosis and therapy of diseases characterised by specific DNA duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant tumours and inflammation. The triple helices form under mild conditions thus assays may be carried out without subjecting the test specimen to harsh conditions. See also AAQ22452-25501 and AAQ30226-447. (Updated on 25-MAR-2003 to correct PN field.) (Updated
                                     This is an exemplary oligonucleotide primer, for use in the detection of neoplasmic related gene mutations. There are over 40 known protonocogenes and suppressor genes to date, which control growth, development, and cell differentiation. Regulation of these genes can, under certain circumstances, be altered and normal cells can assume neoplastic growth characteristics. The invention provides a method for detecting a neoplastic disorder of the head and neck or lung in a subject. The detection of a target mutant nucleotide sequence in the saliva is indicative of a neoplastic disorder of the head, neck or lung. This allows early detection and therefore treatment of the preneoplasia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neoplasia; mutant; target nucleotide; neck cancer; head cancer; saliva test, primer; PCR; amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ21792 standard;
                                                                                                                                                                                                                                                                                   Detection of with cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Exemplary oligonucleotide primer D9S737 (Rev).
                                                                                                                                                                                                                                                                                                                                           WPI; 1999-551428/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9946408-A1
     chemoprevention or chemotherapy
                   This allows early detection and or cancer, and can also be used
                                                                                                                                                                                                                                               Disclosure; Page 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                      cancers
                                                                                                                                                                                                                                                                                                                                                                                                                      SNHOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-00038637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US005220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                      HOPKINS SCHOOL MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                                               99pp; English
                                                                                                                                                                                                                                                                                                      comprises assaying
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Pred. No. 1.
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                         monitor high
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hybridization; chemotherapy;
                                                                                                                                                                                                                                                                                                        for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 Other;
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                                                                                                                                                                                                                                                                                                      genetic mutation associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lung cancer;
early detect
                       patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       detection;
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                       undergoing
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AAH40898
ID AAH4
XX
AC AAH4
XX
DT 14-1
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                                                        RESULT 1959
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                         Matches
                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                        Screening fibrillin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                        The present invention describes a method for identifying compounds which modulate the activity of epidermal growth factor-containing fibrillin like extracellular matrix protein 1 (BFEMP1). The human BFEMP1 coding and protein sequences are also provided. Compounds of the invention can be used in the treatment of macular degeneration and other diseases related to BFEMP1. The present sequence is a PCR primer for a fragment of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF76529 standard; DNA; 18
                   AAH40898;
                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                      Stone
                                                                                                                                                                                                                                                                                                                                                                            28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EFEMP1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human;
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                                     AAH40898
                                                                                                                                                                                                                                                            Example
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                                                                                                                                 Local
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                                                                                              971 CGGCTCACTGCAACCTC 987
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                                                                                                                                                                                                                                                                             for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BGF-containing fibrillin-like extracellular matr.
; macular degeneration; chromosome 2; PCR primer;
                                                                                                                                  Similarity
                                                                                                                                                                                                                                                           1; Page 67; 92pp;
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                                     standard; DNA; 18
                                                                                    CAGCTCACTGCAACCTC
                                                                                                                                                                                                                                                                                       assays to identify compounds that modulate EGF-containing like extracellular matrix protein 1 bioactivity, which ar
                                                                                                                                                                                                                                                                                                                                      Sheffield
                                                                                                                                                             B₽;
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14-AUG-2001

(first

SNP specific lower PCR primer SEQ ID

3694.

Single

polymorphism;

SNP; single nucleotide primer extension;

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RESULT 1960
AAH38514/c
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The oligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The oligonucleotides are useful for determining the presence, absence or oligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesterolaemia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic inflammation, cancer, nervous system diseases in difference in the state of the
                                                                                                                                                                                                                                                                                                       Query Match
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Matches 16
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                            AAH38514
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18
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RESULT 1961 AAH40802

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AAH40802 standard;

DNA;

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cc performing a single-nucleotide primer extension reaction. The coligonucleotides are useful for determining the presence, absence or determity of a SNP and for genotyping nucleic acid samples, for e.g. to cassess by association analysis the genotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. cc agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular cdystrophy, familial hypercholesterolaemia, polycystic kidney disease, cc osteogenesis imperfecte and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial cdisease, including, rheumatoid arthritis, multiple sclerosis, including, rheumatoid arthritis, multiple sclerosis, concorganism. The method is also useful in forensic investigations and contermity analysis. The present sequence represents a PCR primer specific for a human sub content is some captured as a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence represents a PCR primer specific for the present sequence presents a PCR pr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAH37205 AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by
                                                                                                                                                                                                                                                                                                                        Sequence 18
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GGCTGGAGTGCAATGGC
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                                                                                                                                Conservative
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14-AUG-2001

(first entry)

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ABK27429/c
ID ABK27429 standard;
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                                                            RESULT 1962
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 68; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP specific lower PCR primer SEQ ID
                                                                                                                                                                                                                                                                                                                                   inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and paternity analysis. The present sequence represents a PCR primer specific
                                                                                                                                                                                                                                                                                                                      for a human SNP containing DNA sequence
                                                                                                                                                            376
                                                                                                                                                                                                 l Similarity
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Pred. No. 1
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DNA;

18 BP.

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The invention relates to an isolated nucleic acid (I) involved in growth cregulation in human colonic epithelial cells, termed CATX. (I) is useful cas a probe/primer for detecting tumours, preferably colon cancer. The nucleic acid, encoded polypeptide and antibody are useful in diagnosis cand treatment of abnormal cell growth (such as cervical cancer, and treatment of abnormal cell growth (such as cervical cancer, lymphomas), in screening assays for the treatment of abnormal cell growth, for raising antibodies, and to screen for peptide analogues and cantagonists. (I) is useful as a biomarker for human tumour cells, e.g., colon cancer cells, for generating probes and primers designed for colonic cancer cells, for generating probes and primers designed for stage of development, so that premalignant cells can be identified prior to their spreading throughout the human body. (I) allows early detection of potentially cancerous conditions, and treatment of the cancerous conditions prior to development of an irreversible cancerous condition. ABK27426-CC ABK27469 represent human colon cancer associated coding sequences and crimers of the invention
                                                                                                                                                                                                          RESULT 1963
                                                                                                                                                                                 ABS97649
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid involved in growth regulation in human colonic epithelial cells, termed CATX, for diagnosing and treating abnormal cell growth, and for use as a probe/primer for detecting tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; colon cancer; tumour; abnormal cell growth; melanoma; cervical cancer; colorectal adenocarcinoma; Wilms' tumour; leukaemia; lymphoma; antisense therapy; CATX; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-121548/16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bowman BM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-AUG-2000; 2000WO-US021606.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-FEB-2001.
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Human glutathione-S-transferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Page 87; 130pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FARB ) BAYER CORP.
                                                   23-DEC-2002
                                                                                                                                                         ABS97649
                                                                                                                                                                                                                                                                                                                                  644 CCAGGCTGGAGTGCAGT
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                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                         standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 A; 8 C;
                                                                                                                                                                                                                                                                                                                                                                                                               1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 G; 4 T; 0 U;
                                                                                                                                                                                                                                                                                                                                     660
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Pred. No. 1.7e
0; Mismatches
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     12
     (GST12)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
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     PCR
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Cytochrome P450 A2; Cyt4501A2; cytochrome P450 02E; CYP45002E1; LTF; and adrenergic receptor beta1; ADB1; aryl hydrocarbon; AHR; MRP3; NR112; KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DB1; haematological; kW cyclooxgenase 2; EPHX2; 5-lipoxygenase activating protein; FLAP; KW glutathione-S-transferase; GST12; histamine-N-methyl transferase; KW HNMT; Kallikrein 2; KLKX; nicotinamide-N-methyl transferase; NNMT; KW NADPH quinone oxidoreductase 2; NOO2; sulforransferase thermolabile; STM; KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA; WUT2B7; UDP-glucuronsyl transferase; UGT2B15; urokinase receptor; UPA; Wmultidrug resistance 1; lactotransferan; orphan nuclear receptor; Wm multidrug resistance associated protein 3; cancer; prostate; KW multidrug mestabolism; cardiovascular function; colorectal tumour; KW altered drug metabolism; cardiovascular function; colorectal tumour; KW central nervous system; pulmonary; immunological.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer; cytochrome P450 Al; CYP4501Al; UGT2B4; MDR1;
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WO200257410-A2

25-JUL-2002

28-NOV-2001; 2001WO-US044838.

28-NOV-2000; 2000US-00724389

(DNAS-) DNA SCI LAB INC

Hall J;

2002-698522/75

Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

12; Page 122; 714pp; English

Combletule comprising at least one base variation from that off a known cytochrome P450 Al (CYP4501Al), aryl hydrocarbon receptor nuclear translocator (CANT), cathepsin S (CTSS), cytochromesa 2 (CXP2), 5-lipoxygenase activating cytochromeyl cytochromesa 2 (CXP12), histamine.N-methyl cytochromeyl transferase 2B4 (CYP4501A), UDP-glucuronosyl transferase 2B4

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8
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Matches
                                                                                   Query Match
                                                                                                                                          protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central a peripheral nervous system function. The present sequence represents a primer used to amplify the sequences of the invention
                                                                                                                 Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                      Local
                           935
                                                       16;
 ب
                                                                        Similarity
                            CTCTGTTACCCAGGCTG 951
 CTATGITACCCAGGCTG
                                                         Conservative
                                                                      94.1%;
                                                                                      1.6%;
 17
                                                                                    Score 15.4;
                                                          Mismatches
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                                                                        1.7e+03
                                                                                    DB 1; Length 18;
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PCR
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ARESULT 1964
ADG14613
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AC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADG14613 standard; DNA; 18 BP
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27-FEB-2001; 2001US-0271811P 27-FEB-2002; 2002WO-US006207.

(UABR-) UAB RES

Ç, Kaslow ₽, Van Leeuwen 덛

WPI; 2002-707021/76

Predicting a therapeutic response comprises comparing a first nucleic acid allele in an interleukin-10 (IL-10) regulatory region with a secondicia acid allele in the IL-10 regulatory region associated with a outcome a second

Claim 12; SEQ ID NO 4; 34pp; English

The invention relates to a method for predicting an individual's Ctherapeutic response to the administration of interferon-alpha-2b and cribavirin for the treatment of a pathological condition, especially chapatitis C virus (HCV) infection. The method involves determining which allelic form is present at positions -3575, -2763, -1082, -819 and -592 cof the interleukin-10 (IL-10) regulatory region, and comparing these with cthe allelic forms at these positions which are associated with a known outcome of interferon-alpha-2b and ribavirin administration. Presence of the single nucleotide polymorphisms -592A and -819T, the -592A/A or -CC the single nucleotide polymorphisms -592A/ and -819T as a haplotype, or possession of the (108)TCATA haplotype (encompassing positions -3575, -2763, -1082, -CC the (108)TCATA haplotype (encompassing positions -3575, -2763, -1082, -CC the (108)TCACC haplotype indicates that the patient will be non-ccc responsive to this therapy. The method optionally further comprises

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RESULT 1965
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; haemal,
gene therapy;
                The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CDG which distinguishes between methylated and non-methylated CDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haematopoietic cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ10660 standard; DNA; 18
                                                                                                                                                                          Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-2002; 2002WO-EP003401
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                                                                                                                                             Claim
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                                                                                                                                                                                                                                                                                                                                                                         (EPIG-)
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¬ A,
¬e I,
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16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                         EPIGENOMICS AG.
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                                                                                                                                                                                                                                                                                                   , Braun A, Distler J, Piepenbrock C, Adorjan Lipscher E, Maier S,
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                                                                                                                                                                                                                                                                                   Lipscher E, I
                                                                                                                                           Page 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 4 A;
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                                                                                                                                       117pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         proliferation disorder related oligonucleotide
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                                                                                                                                           English.
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Pred. No. 1.
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P, Grabs

Model F,
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G, Lesche k
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he R, Leu E;
V, Otto T,
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dinucleotides

the target nucleic acid. ABZ09861 to

ABZ11118

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RESULT 1966
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC represent specifically claimed nucleotide sequences from the present cc invention. Oligonucleotides from the present invention can be used: for CC disorder haematopoietic dells; for differentiating between healthy haematopoietic cells and proliferative CC disorder haematopoietic dells; for differentiating between acute CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for CC determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder CC related sequences and their complements; and a primers for the CC amplification of haematopoietic cell proliferation disorder related DNA CC sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between CC be used for detecting a predisposition to, differentiation between CC classe, diagnosis, prognosis, treatment and/or monitoring of CC haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders allowing for improved and informed treatment of patients
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Best Local
14 AUG-2001
17-SEP-2001
19-SEP-2001
21-SEP-2001
21-SEP-2001
21-SEP-2001
25-SEP-2001
09-CCT-2001
21-NOV-2001
21-NOV-2001
21-FEB-2002
22-FEB-2002
28-FEB-2002
01-MAR-2002
01-MAR-2002
12-MAR-2002
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24-JUL-2001;
27-JUL-2001;
30-JUL-2001;
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                                                                                                                                                                                                                                                                                                                                  05-JUL-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOVX; cytostatic; gene therapy; vaccine; cancer; chromosome mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOVX oligonucleotide forward
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                                                     2001US-0323821P.
2001US-0323948P.
2001US-0324711P.
2001US-0327893P.
2001US-0337968P.
2002US-0359191P.
2002US-0358939P.
2002US-036923P.
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                                                                                                                                                               2001US-0307536P.
2001US-030822BP.
2001US-0308877P.
2001US-0312203P.
2001US-0322640P.
2001US-0323484P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ou;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>.</u>
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RESULT 1967
ADN02351
ID ADN0235
XX
AC ADN0235
XX
AC ADN0235
XX
DT 15-JUL-
XX
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                                                                                                                                                                                                                                                                                                                                          composition, a method for determining the presence or amount of the presence of, or predisposition to, a disease associated with the altered composition subject; identification to, a disease associated with the altered commandation subject; identification of an agent that binds to the polypeptide; identification of an agent that binds to the polypeptide; identification of a potential therapeutic agent for treating composition; or predisposition to, a disease associated with the altered composition subject; identification of an agent that binds to the polypeptide; identification of a potential therapeutic agent for treating composition; a method of screening for a modulator of activity or latency of, or predisposition to, a pathology associated with the polypeptide; a method for modulating the activity of the polypeptide; treating or preventing a pathology associated with the polypeptide; treating a pathology associated with the polypeptide; comprising the vector; an antibody that immunospecifically binds to the polypeptide; and a method for producing the polypeptide. The NOVX polypeptide and its encoding nucleic acid molecule; a cell colypeptide; and a method for producing the polypeptide. The NOVX polypeptide can be used in gene therapy to treat disorders. The conversion of preparing a composition for treating or preventing a pathological state in a mammal, e.g., cancer, or for chromosome mapping. This polymucleotide sequence represents a primer used in the
                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-2002;
16-APR-2002;
16-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shimkets RA, Taupie
Padigaru M, Peyman
Pena CEA, Chapoval
                       15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the 109-1671 amino acid polypeptide; or a sequence comprising one or muconservative substitutions in the 109-1671 amino acid polypeptide. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New NOVX polypeptide, useful for preparing a composition preventing e.g. cancer or for chromosome mapping.
                                                         ADN02351;
                                                                                              ADN02351
                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                             exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example C; SEQ ID NO 133; 433pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Catterton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Li L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2003-812538/76.
                                                                                                                                                                                                                              535
                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vention relates to a novel isolated polypeptide, designated NOVX.

vel polypeptide comprises a sequence comprising 109-1671 amino

or its mature form; a sequence that is at least 95% identical to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shenoy SG, Pattura
ton E, Spytek KA,
ts RA, Taupier RJ,
                                                                                                                                                                                                                                                                l Similarity
16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURAGEN
                                                                                              standard;
                                                                                                                                                                                         CTCCAGCCTCAGCCTCC 1
                                                                                                                                                                                                                              CTCCTGCCTCAGCCTCC 551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; 2002US-0363683P.
2002US-0372141P.
2002US-0372967P.
; 2002US-0373051P.
; 2002US-0373063P.
; 2002US-0373280P.
; 2002US-0373280P.
; 2002US-0373881P.
; 2002US-00187975.
                                                                                                                                                                                                                                                                  Conservative
                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patturajan M, Ellerman K, Gorman L, ----
ek KA, Miller CE, Edinger SR, Hjalt T, C
ider RJ, Anderson DW, Guo X, Baumgartner i
an JA, Smithson G, Casman SJ, Voss EZ, B
X Smithson G, Casman SJ, Vernet CAM;
                                                                                              DNA;
                                                                                                                                                                                                                                                                                  1.6%;
                                                                                                                                                                                                                                                                                                                                        2 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                              18
                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                Score 15.4; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                   Length 18
                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Boldog FL;
                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerlach
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ADNO6374/c
ID ADNO637
XX ADNO637
AC ADNO637
XX ADNO637
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DE Human F
XX
DE Human F
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DE Hukotz
KW leukotz
KW leukotz
KW 1-1ipox
KW 5-1ipox
KW 5-Lo ge
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                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                   abnormality is an indication that the patient has an increased risk of the late-onset neurodegenerative disease. DAO is a flavin dinucleotide (FAD) -dependent oxidase which catalyses the oxidative deamination of D-amino acids (EC.1.4.3.3). The method of the invention has neuroprotective and antiparkinsonian applications and may be useful in determining an increased risk of a late-onset neurodegenerative disease to a patient, as well as in preparing a medicament for treating a late-onset neurodegenerative disease to a patient, as well as in preparing a medicament for treating a late-onset neurodegenerative disease (AD), possibly via gene therapy. The current sequence is that of a PCR primer 2 of the invention which was used to amplify human D-amino acid oxidase exon 1 gDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                late-onset neurodegenerative disease; D-amino acid oxidase; DAO; flavin dinucleotide; FAD-dependent oxidase; D-amino acid oxidative deamination; EC.1.4.3.3; neuroprotective; antiparkinsonian; amyotrophic lateral sclerosis; ALS; Parkinson' Alzheimer's; gene therapy; human; ss; PCR; primer; chromosome 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analysing
a D-amino
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 whether
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-348204/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mitchell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-2002; 2002GB-00023424.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2003; 2003WO-GB004337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004033723-A2
                                                                                                                                                                              ADN06374;
                                                                                                                                                                                                            ADN06374 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer 2 used to
                                                                              leukotriene synthesis inhibitor; myocardial infarction;
                                                                                                                                               15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel method for determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                patient
                                                                                                                                                                                                                                                                                                                          877
                                                                                                               FLAP
                                                             coronary
                                                                                                                                                                                                                                                                                                                                                        16;
                                                                                                                                                                                                                                                                                            -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ning an increased risk of a late-onset neurodegenerative disease tient comprises analyzing a sample from the patient to determine the patient has a D-amino acid oxidase (DAO) abnormality.
                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                            GCGTGAACCACCACGCC
                                                                                                                                                                                                                                                                                                                          GCGTGAGCCACCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a sample from the patient to determine whether the patient has acid oxidase (DAO) abnormality, where the presence of a DAO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 79; 209pp; English
                                                                                                               related microsatellite marker SEQ
                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 4 A; 8 C; 4 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            De Belleroche
                                                                                                                                             (first
                                                             syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neurodegenerative disease to a patient
                                                                                                                                                                                                            DNA;
                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                       1.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amplify
                                                                                                                                                                                                                18
                                                             antiatherosclerotic;
                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                            893
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                         Score 15.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human D-amino acid oxidase exon 1 gDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                        2 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                           .7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                         0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                               ID NO:22.
                                                                  cardiant; antianginal;
                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chromosome 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parkinson's;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  which comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 an increased risk
                                                                                                                                                                                                                                                                                                                                                            <u>.</u>
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exon
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leukotriene biosynthesis inhibitor; leukotriene receptor antagonist; 5-lipoxygenase activating protein; FLAP; human; chromosome 13; chromosome 13q12; polymorphism; 5-lipoxygenase gene promoter;

hypertension;

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CC chosen from diabetes, hypertension, hypercholesterolaemia, elevated CC lp(a), obesity, past or current smoker; in an individual having elevated CC inflammatory marker chosen from C-reactive protein (CRP), serum amyloid CC A, fibrinogen, leukotriene, leukotriene metabolite, interleukin-6, tissue necrosis factor-alpha, soluble vascular cell adhesion molecule (sVCAM), CC soluble intervascular adhesion molecule (sICAM), E-selectin, matrix CC metalloprotease type-1, matrix metalloprotease type-2, matrix CC individual having increased low density lipoprotein (LDL) cholesterol CC and/or decreased high density lipoprotein (HDL) cholesterol; in an individual having increased leukotriene synthesis; in an individual corrent, stable angina; or in an individual who has atherosclerosis or who CC event, stable angina; or in an individual who has atherosclerosis or who CC event, stable angina; non-sy-elevation myocardial infarction (STEMI). The human FLAP gene is located CC on chromosome 13, more specifically to 13q12. The present sequence CC represent a microsatellite marker used in the exemplification of the
                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (I) for the manufacture of a medicament for the treatment of myocardial infarction or susceptibility to myocardial infarction in an individual. Also described is a method (M1) for the treatment of acute coronary syndrome (ACS) in an individual comprising administering (1) (1) has antiatherosclerotic, cardiant and antianginal activities, and can be used as a leukotriene biosynthesis inhibitor, and a leukotriene receptor antagonist. (I) can be use for the manufacture of a medicament for the treatment of myocardial infarction or susceptibility to myocardial infarction in an individual who has at least one risk factor chosen from an at-risk haplotype for myocardial infarction, an at-risk haplotype in the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a FLAP nucleic acid and an at-risk polymorphism in the 5-lipoxygenase (5-thosen from the form of the form o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        obesity; inflammatory marker; low density lipoprotein; cholesterol; high density lipoprotein; angina; atherosclerosis; microsatellite marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Use of leukotriene synthesis inhibitor for manufacture of a medicament for treatment for myocardial infarction or susceptibility to myocardial infarction in individual.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-OCT-2002; 2002US-0419433P
21-FEB-2003; 2003US-0449331P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-APR-2004.
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                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-357211/33.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DECO-) DECODE GENETICS EHF
                                                                                                                                                                       BP; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney ME,
                                                                                                                                                                       Ą
1.6%;
                                                                                                                                                                 7 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               describes using a re of a medicament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                306pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gulcher JR
                                                                                                                                                                       G; 5 T; 0 U; 0 Other;
     Score 15.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a leukotriene synthesis inhibitor nt for the treatment of myocardial
                                                               DB 1;
                                                         Length 18;
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17

CCCAGGCTGGAGTGCAA 959 CCCAGGCTGGAGAGCAA 1

Matches

Similarity

Conservative

<u>.</u>

Mismatches

Indels

0

Gaps

0

Matches Query Match

16;

Conservative

0;

Mismatches

٥,

Gaps

0

Similarity

1.6%;

Score 15.4; Pred. No. 1.

..7e+03

Length Indels

18

BP;

4 A,

6 C; 4 G; 4 T;

0 U;

0 Other; DB 1;

482 GCAGTGGTGTGATCACA 498

밁 Ś

18

GCAGTGGTGATCCCA

.7e+03

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RESULT 1969
AD043261/c
ID AD04326
XX AD04326
XX Bipolar
XX Claim 1
XX Bipolar
XX The precion
CC D12SDKI
CC D12
                                                                                         The present sequence is that of primer D12SDK1F which, with primer CC D12SDK1R AD043262, can be used to amplify D12SDK1, a novel microsatellite CC marker associated with bipolar affective disorder and genetically related CC unipolar affective disorder. D12SDK1 comprises a dinucleotide repeat. 8 CC Alleles (134-152 bp) have been detected. A locus for bipolar disorder and CC related unipolar affective disorders has been fine mapped on chromosome C1 2 (C12) for the first time and several genes that are carrying mutations CC region is approximately 2 million base pairs of DNA in the chromosomal CC region 12q24.3 on the short arm of chromosome 12 between markers D1282705 CC and D12S340. The inventors genotyped 21 newly described and previously published microsatellite markers in a sample of 381 Danish and British CC bipolar patients and compared the frequency of marker alleles to a CC matched control group. Differences in allele frequencies, which were CC highly statistically significant, were found for 10 of these markers. Based on the results, the invention provides markers and methods of using them in diagnosing, or determining the susceptibility of an individual compounds for use as part of therapeutic and/or diagnostic methods. A method of treatment comprises administering a substance that modulates capacitative gene or which modulates the level of activity
                                                                   method of treatment comprises expression of a candidate gene of a candidate gene product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diagnosing, prognosing, or determining the susceptibility to, a neuropsychiatric disorder using a C12 candidate gene region marker by determining the structure, level of expression or activity of a polypeptide encoded by the gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bipolar affective disorder; Unipolar affective disorder; diagnosis; marker; neuroleptic; gene therapy; PCR; primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO43261 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-OCT-2002; 2002GB-00025360
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 19; Page 79; 96pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004040016-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kalsi G, Mu
Lundorf MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Degn
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RESULT 1971
ADO48745
ID ADO4874
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AC ADO4874
XC ADO4874
XX
DT 12-AUG-
XX
Human n
XX
Human;
KW human;
KW human;
KW mannose
XX
OS Homo 88
                                                                                                                                                                                                                                                                                                                                                   RESULT 1970
ADO48762
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                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                        The invention comprises a method for identifying a subject at risk of melanoma. The invention involves detecting the presence or absence of one or more polymorphic variations associated with melanoma in the neuropilin 1 (NRP1) or mannose receptor C type 2 (MRP2) genes. The method of the invention is useful for identifying subjects at risk and treating melanoma. The present DNA sequence represents an extension PCR primer that was used to detect single nucleotide polymorphisms within human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; melanoma; single nucleotide polymorphism; SNP; neuropilin 1; NRP1; mannose receptor C type 2; MRC2; extension PCR; primer; ss; genotyping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO48762 standard;
                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 4 A; 3 C; 6 G; 4 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roth
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                 Homo sapiens
                                         human; melanoma; single nucleotide polymorphism; SNP; neuropilin 1; NRP1; mannose receptor C type 2; MRC2; extension PCR; primer; ss; genotyping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Page 79; 176pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying a subjec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-411720/38.
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23-JUL-2003; 2003US-0489703P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human neuropilin 1 (NRP1) extension PCR primer
                                                                                   Human neuropilin 1 (NRP1) extension PCR primer #47.
                                                                                                              12-AUG-2004
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                                                                                                                                          AD048745
                                                                                                                                                                   ADO48745 standard;
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                                                                                                                                                                                                                                                        392 GTGCTGGGATTACAGGC 408
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                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                           Score 15.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                           1.7e+03;
                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                     Length 18;
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AD056946/c
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention comprises a method for identifying a subject at risk of melanoma. The invention involves detecting the presence or absence of one or more polymorphic variations associated with melanoma in the neuropilin 1 (NRP1) or mannose receptor C type 2 (MRC2) genes. The method of the invention is useful for identifying subjects at risk and treating melanoma. The present DNA sequence represents an extension PCR primer that was used to detect single nucleotide polymorphisms within human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 4 A; 3 C; 6 G; 4 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-2002;
23-JUL-2003;
                                                                                                                                                                                                 melanoma associated polymorphic variation; SNP;
single nucleotide polymorphism; CARK; FPGT;
cardiac ankyrin repeat kinase; fucose-1-phosphate guanylyltransferase;
                                                                                                                                                                                                                                                             Human CARK/FPGT proximal SNP probe #12
                                                                                                                                                                                                                                                                                                             AD056946;
                                                                                                                                                                                                                                                                                                                                     ADO56946 standard;
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           Roth RB,
                                                         06-NOV-2002;
23-JUL-2003;
                                                                                           06-NOV-2003; 2003WO-US035879
                                                                                                                                          WO2004044164-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NRP1.
                                                                                                                    27-MAY-2004.
                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                        gene therapy;
                                                                                                                                                                                                                                                                                    12-AUG-2004
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                                 SEQU-) SEQUENOM INC
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           Nelson MR,
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2003US-0489703P.
                                                         2002US-0424475P.
2003US-0489703P.
                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                        human;
                                                                                                                                                                                                                                                                                                                                  DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.6%;
                                                                                                                                                                                                                                        ss; melanoma;
           Braun
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Pred. No. 1.7e
0; Mismatches
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            Kammerer SM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
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variations Identifying

detecting

g a subject at risk of melanoma, useful for treating melanoma, detecting the presence or absence of one or more polymorphic associated with melanoma in a nucleic acid sample from a

2004-411721/38

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RESULT 1973
ADD5648
ADD5648
XX
ADD64000
XX
ADD6648
ADD6648
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ADC6648
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ADD6648
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AD
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject, and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence represents a human cardiac ankyrin repeat kinase/fucose-1-phosphate guanylyltransferase, CARK/FPGT, proximal probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-AUG-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human cyclin-dependent kinase 10,
                                                                                                                                   Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                06-NOV-2002;
23-JUL-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          melanoma
                                                         Example 5;
                                                                                                                                                                                                                                            WPI; 2004-411721/38.
                                                                                                                                                                                                                                                                                           RB,
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                                                         Page 83; 295pp;
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                                                                                                                                                                                                                                                                                                                                                                                                2002US-0424475P
2003US-0489703P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polymorphic variation;
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                                                                                                                                                                                                                                                                                             Braun
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                                                         English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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Pred. No. 1
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                                                                                                                                                                                                                                                                                             Kammerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDK10 proximal SNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDK10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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88888888888888
                                          melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject. Preventing melanoma in a subject comprises detecting t presence or absence of one or more polymorphic variations associated we melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the presence acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The preventative reduces ultraviolet (UV) light exposure to the subject. The preventating melanoma. The present sequence represents a human cyclin-dependent kinase 10, CDK10, proximal SNP pro
  Sequence
  18
  BP; 4 A; 7 C; 4
  G; 2 T; 0 U;
       1 Other;
                                                                                                                                                                                                                                                                                        sampl
                                                          probe
                                                                                                                                                                                                                                         with
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Matches
                                                                                                   Query Match
Best Local
ADO57017 standard; DNA; 18
                                                                       249 TCGGCCTCCCAAAGTGC 265
                                                                                        11 Similarity
16; Conserv
                                                                                          Conservative
                                                                                                    1.6%;
                                                   17
                                                                                          Score 15.4; D
Pred. No. 1.7e
0; Mismatches
                                                                                          0
                                                                                                     .7e+03
                                                                                            Indels
                                                                                            0;
                                                                                            Gaps
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DB 1;

Length

0

문 S

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melanoma associated polymorphic variation;
single nucleotide polymorphism; CARK; FPGT;
cardiac ankyrin repeat kinase; fucose-1-pho
                                                                                probe.
WO2004044164-A2
                                       Homo sapiens
                                                                                                                                                                   gene therapy; human;
                                                                                                                                                                                                          Human CARK/FPGT proximal SNP
                                                                                                                                                                                                                                                      12-AUG-2004
                                                                                                                                                                                                                                                                                             ADO57017;
                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                     ss; melanoma;
                                                                                                                                                                                                              probe
                                                                                                        fucose-1-phosphate guanylyltransferase,
                                                                                                                                                 SNP;
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06-NOV-2002;
23-JUL-2003;
                                                                06-NOV-2003; 2003WO-US035879
                                                                                             27-MAY-2004.
(SEQU-)
SEQUENOM INC
                           2002US-0424475P
2003US-0489703P
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Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a

WPI; 2004-411721/38.

Roth

Nelson MR,

Braun

Þ

Kammerer

Example 7; Page 121; 295pp; English.

The invention relates to a method of identifying a subject at risk of melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nuclaic acid samplerom a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and mple the with

The invention

relates to

þ

method of identifying

a subject at risk of

X8XXXX

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RESULT 1975
ADP08750
ID ADP0875
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,Best Local S
Matches 16
                                                       Query Match
Best Local S
Matches 16
                                                                                                                                                       The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single more polymorphisms within human glycoprotein VI (platelet) (GP6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          compositions are useful for treating melanoma. The present sequence represents a human cardiac ankyrin repeat kinase/fucose-1-phosphate guanylyltransferase, CARK/FPGT, proximal probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           breast cancer; cyt
GP6; GPIV; GPVI; c
single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18
                                                                                                                 Sequence 18
                                                                                                                                                                                                                                                                                                                                                Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                              GPIV;GPVI)
                                                                                                                                                                                                                                                                                                      Example 3; Page 83; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-441082/41.
                                                                                                                                                                                                                                                                                                                                                                                                                          Roth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004047767-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Extend
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADP08750;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADP08750 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-NOV-2003; 2003WO-US037966.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 CTCGTGATCTGCCTGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer; cytostatic; gene therapy; human; platelet glycoprotein VI; PIV; GPVI; chromosome 19q13.4; ss; PCR; primer; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer 87 used
N
                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGTGATCTGCCTGCC 848
                           CAGGCTGGTCTCGAACT 223
CAGGCTGGACTCGAACT 18
                                                                                                                                                                                                                                                                                                                                                                                                                       Nelson MR,
                                                                                                                                           DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                   preventing and/or treating breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 5 A; 4 C; 7 G; 1 T; 0 U; 1 Other;
                                                                                                               BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.6%;
                                                                   1.6%;
                                                                                                               6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to genotype human glycoprotein VI polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                         Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
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Pred. No. 1.7e+03;
                                                                       Score 15.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       Kammerer
                                                                       1.7e+03
                                                                                                                                                                                                                                                                                                                                                                                                                         ×,
                                                                                   DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                    cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                         Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18
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                                                         Indels
                                                       0,
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                                                       Gaps
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RESULT 1976
ADQ78196
ID ADQ7819
XX
AC ADQ7819
XX
OT 09-SEP-
XX
                    RESULT 1977
AAH39033/c
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ij
                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                    for detecting methylation of promoter CpG islands occurring in multiple genes. The present invention describes using oligonucleotide primers to determine the position of a target gene and promoter CpG islands, this constitutes treating DNA of the target gene with sodium bisulfite in order to carry out methylation specific (MSP) PCR or multiplex MSP PCR to amplify the sodium bisulfite treated DNA and sequencing the PCR product to confirm the hypomethylation site of the promoter CpG islands of multiple genes. Accordingly, the chip comprises primer sequences designed from these PCR products that have amine linkers of 12 carbons attached to the 5'-terminal, which are spotted onto the glass slide coated with 3-aminopropyltrimethoxylan and 1,4-dissothocyanate using an array robot. The resulting minisequencing chip is useful for detecting cancer, thereby accurately and rapidly detecting methylation of CpG islands of multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minisequencing type oligonucleotide chip for detecting methylation of promoter CpG islands of multiple genes, useful for detecting cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mini-sequencing; CpG island; methylation specific PCR; MSP; multiplex MSP PCR; cancer; PCR; primer; ss; microarray chip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-2004 (first entry)
AAH39033 standard;
                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 1 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to a novel mini-sequencing type DNA oligonucleotide chip. Specifically, it refers to a chip the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 13; SEQ ID NO 878; 248pp; Korean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-095256/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Choi HI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-FEB-2002; 2002KR-00009132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-2002; 2002KR-00025108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ78196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ78196 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KR2003069752-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer used
                                                                                                                                                                                                                                                                                                                                                                 exemplification
                                                                                                                                                                                                                                                                                                                                                                                          genes. This oligonucleotide sequence is a PCR primer given in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GOOD-)
                                                                                                                                                                      427
                                                                                                                                                                                                                      16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GOODGENE INC
                                                                                                                                               TTTTTATTTTATTTTTT 443
                                                                                                                      TTTTTATTTTTTTT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eom TH,
                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                                   of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amplify cancer related
DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer; PCR; primer; ss; microarray chip
                                                                                                                                                                                                                                        1.6%;
                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim OH,
                                                                                                                                                                                                                                             Score 15.4;
Pred. No. 1
                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mun
                                                                                                                                                                                                                                             1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,
S
                                                                                                                                                                                                                                                                      DB 1;
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                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chip that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Song
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SeqID
                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    is useful
                                                                                                                                                                                                                      Gaps
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14-AUG-2001 AAH39033;

(first entry)

0

SNP specific upper PCR primer SEQ ID 1829.

SEQ

IJ

NO:

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RESULT 1978
AAF91124/C
ID AAF9112
XX
AC AAF9112
XX
DT 04-MAY-
XX
                                                                                                                                                                                                                                                                                                                                           Crimer extension (SNPE) primers, and the sequences of regions flanking concludes kits for determining the presence or absence of a SNP, using the coligonucleotides of the invention. The PCR primers are used to amplify a CC SNP flanking sequence, the SNPE primer is used as a genotyping primer. CC The oligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The CC identity of a SNP and for genotyping nucleic acid sample by clidentity of a SNP and for genotyping nucleic acid samples, for e.g. to consider the presence, absence or cc identity of a SNP and for genotyping nucleic acid samples, for e.g. to cidentity of a SNP and for genotyping nucleic acid samples, for e.g. to casses by association analysis the genotypic trait suspected of being caused by one or more SNPs. Phenotypic traits usepected of being caused by one or more SNPs. Phenotypic traits usepected of being consummaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular cdystrophy, familial hypercholesterolaemia, polycystic kidney diseases, cc osteogenesis imperfecta and acute intermittent porphyria. Phenotypic craits also include symptoms of or susceptibility to multifactorial cc diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and cc paternity analysis. The present someoners represents a DCP primer specific
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                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                              L124/c
AAF91124
                                                                                                                                                                                                                                                                                                                                                                                                microorganism. The method is also useful in forensic invest paternity analysis. The present sequence represents a PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 59; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-OCT-2000; 2000WO-US028436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200129262-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNPE; genotyping;
Lesch-Nyhan syndro
                                                                                                                                                                                                                                                                                                                                           Sequence
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                         04-MAY-2001
                                                          AAF91124;
                                                                                                                                                                                                                                                                                                                                                                                 for a human
                                                                                                                                                                                                                             648
                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                      Similarity
                                                                                                standard;
                                                                                                                                                                                                                         GCTGGAGTGCAGTGGCG
                                                                                                                                                                                                                                                                                                                                             19 BP; 4
                                                                                                                                                                                          GCTGGAGTGCAGTGGTG 3
                                                                                                                                                                                                                                                                                                                                                                                   SNP
                                                                                                                                                                                                                                                                   Conservative
                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0160096P.
                                                                                                                                                                                                                                                                                                                                                                               containing
                                                                                                                                                                                                                                                                                                                                             P
                                                                                                DNA; 19
                       entry)
                                                                                                                                                                                                                                                                                    1.6%;
                                                                                                                                                                                                                                                                                                                                             10
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                                                                                                                                                                                                                                                                                                                                             N
                                                                                                                                                                                                                                                                                                                                                                               DNA sequence
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                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                      Score 15.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                             G; 3 T; 0 U;
                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                  1.7e+03;
                                                                                                                                                                                                                                                                                                          DВ
                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                        1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUL-1999; 99EP-00114938
22-FEB-2000; 2000EP-00103361
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                                                                                                                                                                                                                                                            inflammatory disease; neuronal disease; cardiovascular disease; PCR primer; ss.
                                                                                                                                                                                                                                                                                      Human; MDR-1; multi drug resistance-1; drug inflammatory disease; neuronal disease; CNS
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(EPID-) EPIDAUROS BIOTECHNOLOGIE
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ammatory and CNS diseases
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2000EP-00103361.
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RESULT 1980
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The present invention describes the use of irinotecan (I) or its derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, sestric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a cytochrome p450, subfamily IIIA (nifedipine oxidase), polypoptide 5 (CYP3A5) polymorlectide (II). (I) and (II) have cytostatic activity. The therapeutic applications of (I) is improved,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention provides nucleotides encoding molecular vari the human multi drug resistance-1 (MDR-1) protein. These can be us identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, whi lead to difficulties in treating cancer, cardiovascular, neuronal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MDR) -1 pol
associated
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                                                                                                                                                   New use of irinotecan for preparation of compositions for treating in subject having genome with variant allele comprising cytochrome subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
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24-MAY-2002; 2002EP-00011710
                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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       CC derivative for the preparation of a pharmacoutical composition for cc treating colorectal, cervical, gastric, lung, ovarian or pancreatic cc cancer, or malignant glioma in a subject having a genome with a variant cc cd allele which comprises a cytochrome p450, subfamily IIIA (nifedipine cc oxidase), polypeptide 5 (CYP9A5) polymucleotide (II). (I) and (II) have cc cytostatic activity. The therapeutic applications of (II) is improved, cc since it is possible to individually treat a subject with an appropriate cc dosage and/or an appropriate derivative of (I). Therefore, undesirable, cc harmful or toxic effects are efficiently avoided. Unnecessary and constraint with substances (nonresponders), as well as the development of chug resistances due to suboptimal drug dosing can be avoided. ACF62200 cc exemplification of the present invention
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                                                                                                                                                                                                                                                                                  New use of irinotecan for preparation of compositions for treating in subject having genome with variant allele comprising cytochrome subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
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24-MAY-2002;
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Best Local :
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lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of irinotecan or its derivative for preparation of a pharmaceutical composition for treating cancer in a subject having a genome with a variant allele comprising a multidrug resistance protein 1
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24-MAY-2002;
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2002EP-00011710.
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lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic;
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ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
                                                                                     Human UGT1A1
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                                                                                     variant allele sequence fragment SEQ ID NO:523
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RESULT 1985
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XX U5-DE Human 
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Best Local S
Matches 16
                                                                                                                                                                                                                                                      ovarian
uridine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the novel use of irinotecan to treat a patient suffering from cancer. This involves determining if the patient has one or more variant alleles of the UGTIA1 gene, and if the patient has one or more of such variant alleles, irinotecan is administered in an increased or decreased amount in comparison to the amount that is administered without regard to the patient's alleles in the UGTIA1 gene. The invention has cytostatic activity. A composition of the invention acts as a topoisomerase I inhibitor. The method is useful for treating a patient, an animal e.g. mouse or a human, preferably African or Asian, suffering pancreatic cancer or malignant glioma. The present sequence is udes in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGTIA1 gene, administering increased/decreased amounts of irinotecan based on increased/decreased levels of UGTIA1 gene product.
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24-MAY-2002; 2002EP-00011710
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         23-JUL-2002; 2002WO-EP008217
                                                                     20-FEB-2003
                                                                                                                                 WO2003013536-A2
                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                   colorectal cancer;
                                                                                                                                                                                                                                                                                                                                            ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                        Human UGT1A1 variant allele sequence fragment SEQ ID NO:524
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                                                                                                                                                                                                                                                tal cancer; cervical cancer; gastric cancer; lung cancer; cancer; pancreatic cancer; malignant glioma; diphosphate glycosyltransferasel member Al.
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1; Mismatches
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Pred. No. 1
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RESULT 1986
ADB97438
ID ADB9743
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Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                           irinotecan; colorectal cancer; cervical cancer; q
lung cancer; ovarian cancer; pancreatic cancer; n
nultidrug resistance 1; MDR1; cytostatic; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 1 A; 9 C; 4 G; 4 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of irinotecan based on increased/decreased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGT1A1 gene, administering increased/decreased amounts
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24-MAY-2002;
                                                                                                          23-JUL-2001; 2001EP-00117608
24-MAY-2002; 2002EP-00011710
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                                                    Heinrich G,
                                                                                                                                                   23-JUL-2002; 2002WO-EP008218.
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                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                      Human MDR1 variant allele sequence fragment
                                                                                                                                                                                                                                                                                                                                                                                                                         ADB97438 standard;
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                        2003-268145/26
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2002EP-00011710
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                                                                                 BIOTECHNOLOGIE
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1; Mismatches
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G
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                                                                                                                                                                                                                                                                              gastric cancer;
malignant glioma;
  ds; Cyp3A5; MRP1; MDR1;
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New use of irinotecan for preparation of pharmaceutical compositions

for

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RESULT 1987
ADB97437/C
ID ADB97437/C
ID ADB9743
AC ADB9
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Matches 16
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The invention relates to the novel use of irinotecan or its derivative for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The invention is useful for the preparation of pharmaceutical compositions for treating colorectal,
                                                                                                                                                                                                                                                                                New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.
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24-MAY-2002;
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lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1;
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                                                                                                                                                                                                                            130pp;
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                                                                                                                                                                                                                            English.
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                                                                                                                                                                                                                                                                                                                pharmaceutical compositions for with variant allele comprising
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Best Local
                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject (preferably human, more preferably African or A or a mouse. The present sequence is used in the exemplification of invention.
                                                                                                                                                     the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprise a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The present sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lung cancer; ovarian
multidrug resistance
                                                                                                                                                                                                                                                                                       New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human MDR1 variant allele sequence fragment SEQ ID NO:524.
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                                                                                                               Sequence 19
                                                                                                                                             exemplification of
                                                                                                                                                                                                                                                              Disclosure; Page 55; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                    Heinrich
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24-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-JUL-2002; 2002WO-EP008220
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                                                                     Local
                                                                                                                                                                                                                                    invention relates ro a novel use of irinotecan or its derivative
                                                                                                                                                                                                                                                                                                                                                          2003-342400/32.
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                                                       l Similarity
16; Conserv
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                               CTTGTGATCTGCCTGCCTC
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                                                                                                               BP; 1 A; 9 C; 4 G; 4 T; 0 U;
                                                         Conservative
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2002EP-00011710
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al cancer; cervical cancer; gastric cancer;
cancer; pancreatic cancer; malignant glioma;
1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
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                                                                     1.6%;
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                                                                                                                                                invention.
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Pred. No. 1.7e
1; Mismatches
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                                                         1;
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 19
                                                                       Score 15.4;
Pred. No. 1
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                                                          Mismatches
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                                                                                                                    1 Other;
                                                                                                                                                                                                                                                                                                                with variant allele comprising
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                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                     Length
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                                                            Indels
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                                                            Gaps
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RESULT 1989

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ID ADB92628 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1990
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cervical,
glioma in
a multidru
                                                                                    late-onset neurodegenerative disease; D-amino acid oxidase; DAO; flavin dinucleotide; FAD-dependent oxidase; DAO; flavin dinucleotide; FAD-dependent oxidase; DAO; p-amino acid oxidative deamination; EC.1.4.3.3; neuroprotective; antiparkinsonian; amyotrophic lateral sclerosis; ALS; Parkinson', Alzheimer's; gene therapy; human; ss; PCR; primer; thioredoxin r.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New use of irinotecan for preparation of pharmaceutical compositions treating cancer in subject having genome with variant allele comprisi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-JUL-2001; 2001EP-00117608
24-MAY-2002; 2002EP-00011710
                                                                                                                                                                                                                                                                PCR primer 2 used to amplify human thioredoxin reductase exon 11
                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN02393 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 55; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             multidrug
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-JUL-2002; 2002WO-EP008220
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human MDR1 variant allele sequence fragment SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
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                                                                                                                                                                                                                                                                                                                            15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates ro a novel use of irinotecan or its derivative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      he preparation of a pharmaceutical composition for treating colorectal ervical, gastric, lung, ovarian or pancreatic cancer, or malignant lioma in a subject having a genome with a variant allele which comprimultidrug resistance 1 (MDR1) polynucleotide. A composition of the movention has cytostatic activity. The present sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  832
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCGTGATCYGCCCGCCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGTGATCTGCCTGCCTC 850
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 4 A; 4 C; 9 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.4; DB 1; Length 19; Pred. No. 1.7e+03; Indels 1; Mismatches 2; Indels
                                                                                    ss; PCR; primer; thioredoxin reductase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for treating colorectal, cancer, or malignant
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                                                                                                                     Parkinson's;
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                                                                                                                                                                                                                                                                   gDNA
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RESULT 1991
AAI78387/c
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of a late-onset neurodegenerative disease to a patient which comprises analysing a sample from the patient to determine whether the patient has a Damino acid oxidase (DAO) abnormality, where the presence of a DAO abnormality is an indication that the patient has an increased risk of the late-onset neurodegenerative disease. DAO is a flavin dinucleotide (FAD)-dependent oxidase which catalyses the oxidative deamination of Damino acids (EC.1.4.3.3). The method of the invention has neuroprotective and antiparkinsonian applications and may be useful in determining an increased risk of a late-onset neurodegenerative disease to a patient, as well as in preparing a medicament for treating a late-onset neurodegenerative disease.
30-NOV-1999; 99US-0168138P
29-NOV-2000; 2000US-00726173
                                            30-NOV-2000; 2000WO-US032758
                                                                                                                                                                 Human; single nucleotide polymorphism; SNP; genorprotein therapy; vaccine; probe; diagnostic assagnantitation; restorative therapy; polymorphic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Parkinson's disease (PD) or Alzheimer's disease (AD), possibly therapy. The current sequence is that of a PCR primer 2 of the which was used to amplify human thioredoxin reductase (TXNRD1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining an increased risk of a late-onset neurodegenerative disease to a patient comprises analyzing a sample from the patient to determine whether the patient has a D-amino acid oxidase (DAO) abnormality.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mitchell J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-OCT-2002; 2002GB-00023424.
                                                                                                                                                                                                                                Human silent SNP containing nucleic acid SEQ:5328
                                                                                                                                                                                                                                                                  09-NOV-2001
                                                                                                                                                                                                                                                                                                AAI78387;
                                                                                                                                                                                                                                                                                                                           AAI78387 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 121; 209pp; English.
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                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel method for determining an increased risk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 2 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                De Belleroche J;
                                                                                                                                                                                                                                                               (first entry)
                 99US-0168138P
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                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.6%;
                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.4; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                       genome;
                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                       detection;
                                                                                                                                                                                                  gene therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention
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RESULT 1992
ADO56498/c
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For example, (I) may be used to treat disorders by rectifying mutations or example, (I) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own production of polypeptide. Additionally, (I) and its complementary sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. The polypeptides encoded by (I) may be used as antigens in the production of antibodies specific for polymorphic polypeptides. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic be used as diagnostic agents for detecting the presence of polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAI73060 to AAI79867 represent isolated human polymorphic polymucleotide sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53114 to AAM53329 represent peptides related to human polymorphic polymucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphic nucleic acid sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-356160/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shimkets RA, Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human cyclin-dependent kinase 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP.
         WPI; 2004-411721/38
                                                                                                                                                                                                                                                                  06-NOV-2003; 2003WO-US035879.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            melanoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO56498
                                                               Roth RB,
                                                                                                                                                                              06-NOV-2002;
23-JUL-2003;
                                                                                                                                                                                                                                                                                                                            27-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                  WO2004044164-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO56498;
                                                                                                                        (SEQU-)
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                                                                                                                     SEQUENOM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGATGAAGTGCAGTGGTGATCACAGCTCACTGCAGCCT 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTTGCAGTGACCCAGGATCGTGCCACTTCACTCCAGCCT 1
                                                               Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 9 A; 16 C;
                                                                                                                                                                              2002US-0424475P.
2003US-0489703P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; ss; melanoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ed polymorphic variation; SNP;
polymorphism; cyclin-dependent kinase 10; CDK10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.6%;
                                                                  Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.4; D
Pred. No. 2e+0
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G; 10 T; 0 U; 0 Other;
                                                               Kammerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDK10 proximal SNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               useful in genetic testing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2e+03;
                                                                  SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
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RESULT 1993
ABZ57114/c
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     from a subject. Treventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence represents a human cyclin-dependent kinase 10, CDK10, proximal SNP probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a subject at risk of melanoma, useful for treating mecomprises detecting the presence or absence of one or more polymovariations associated with melanoma in a nucleic acid sample from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a method of identifying a subject at rimelanoma comprising detecting the presence or absence of one or polymorphic variations associated with melanoma in a nucleic aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ57114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18
                                                                                                                                                                                                                                      24-NOV-2000; 2000CN-00127565
                                                                                                                                                                                                                                                                24-NOV-2000; 2000CN-00127565
                                                                                                                                                                                                                                                                                       26-JUN-2002.
                                                                                                                                                                                                                                                                                                                 CN1355220-A.
                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                peptic ulcer;
                                                                                                                                                                                                                                                                                                                                                                            Human;
                                                                                                                                                                                                                                                                                                                                                                                                     Human KIAA0608 protein 10.12 probe,
                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ57114 standard; DNA;
                                                                                                                                                                                     мао у,
                                                                                                                                                                                                             (UYFU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      867 GGGATTACAGGCGTGA
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                                                                                                                                                                                                                                                                                                                                                                KIAA0608 protein 10.12; ulcer; diabetes; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BGGATTACAGGCGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 4 A; 6 C; 2 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84; 295pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.2; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                  recombinant production; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                          NO: 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treating melanoma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acid sample
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nucleic acids encoding it (ABZ57108). The protein has a molecular weight of 10 kD. The invention also relates to a method for the recombinant production of the protein, an antagonist of the protein, and the use of the protein, gene and antagonist in therapeutic applications. KIAAA608 protein 10.12 can be used in the treatment of a variety of diseases such as peptic ulcers and diabetes. Sequences ABZ57113-ABZ57114 represent human KIAAA608 protein 10.12 probes used in an exemplification of the

The invention relates to human KIAA0608 protein 10.12 (ABP58674) and nucleic acids encoding it (ABZ57108). The protein has a molecular we

Polypeptide-human KIAA0608 protein 10.12 and polynucleotide encoding

1

6; Page 22 (Disclosure); 35pp; Chinese.

WPI; 2003-000145/01

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RESULT 1994
AAI79765/c
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                                            CC sequences (1), which contain single nucleotide polymorphisms (SNPs).

CC AAM53114 to AAM5329 represent peptides related to human polymorphic polymorphic polymorphic polymorphic polymorphic polymorphic polymorphy, and in vaccine production. (1) and the polypeptides encoded by CC them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For CC example, (1) may be used to treat disorders by rectifying mutations or CC deletions in a patient's genome that affect the activity of polypeptides by expression of polypeptides. Additionally, (1) and its complementary cCC sequences may also be used as NAM probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and CCC untibodies may be in need of restorative therapy. The CCC antibodies may be in need of restorative therapy. The CCC antibodies specific for polymorphic polypeptides. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic constraints.
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; single nucleotide polymorphism; SNP; genome; gene therapy; protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human nonconservative amino acid changing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAI79765 standard; DNA; 51
                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 2557; 2653pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-356160/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shimkets RA, Leach M;
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29-NOV-2000; 2000US-00726173
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                                    polypeptides in
                                                                                                                                                                                                                                                                                                                                                       AAI73060 to AAI79867
                                                                                                                                                                                                                                                                                                                                                                                                                                            Polymorphic nucleic acid sequences, useful in genetic testing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-NOV-2000; 2000WO-US032758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655 TGCAGTGGCGCAATCTTGGCTCACTGCA 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36 TGCAGCGAGCCAAGATTGCGTCACTGCA 9
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   51
BP;
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                                    samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.5%;
 17 C; 15 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       represent isolated human polymorphic polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
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Pred. No. 2.2e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP nucleic acid SEQ:6706
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Query Match Best Local Similarity

1.5%; 71.4%;

Score 15.2; Pred. No. 2e

2; DB 1; Length 51; 2e+03;

0

Sequence

8

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RESULT 1995
AAI79764/c
ID AAI79764 standard;
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                            S
                                                                                                                                                              CC sequences (1), which contain single nucleotide polymorphic polynucleotide sequences (1), which contain single nucleotide polymorphisms (SNPs). CC AAM53114 to AAM5329 represent peptides related to human polymorphic polynucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (1) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For example, (1) may be used to treat disorders by rectifying mutations or CC deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own CC production of polypeptide. Additionally, (1) and its complementary csequences may also be used as NAM probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and CC therefore which patients may be used as antigens in the production of polypeptides expression and activity. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic polypeptides.
                                                           Best Loc
Matches
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                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; single nucleotide polymorphism; SNP; genome; protein therapy; vaccine; probe; diagnostic assay; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human nonconservative amino acid changing SNP nucleic acid SEQ:6705.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAI79764;
                                                                                                                         Sequence 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-356160/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-NOV-1999; 99US-0168138P.
29-NOV-2000; 2000US-00726173.
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                                                                                                                                                     polypeptides in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 2557; 2653pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphic nucleic acid sequences, useful in genetic testing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20;
                                                                           Similarity
                          TGCAGTGGCGCAATCTTGGCTCACTGCA 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCAGTGAGCCAAGATTGCGCCACTGCA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCAGTGGCGCAATCTTGGCTCACTGCA
 TGCAGTGAGCCAAGATTGCACCACTGCA
                                                                                                                         BP; 8 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Leach M;
                                                                                                                                                       samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                          1.5%;
                                                                                                                         16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51
                                                                                                                        C; 15 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                           0
                                                                          Score 15.2; DB 1; Length Pred. No. 2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                         Mismatches
                                                                                                                         12
                                                                                                                         T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                         U; 0 Other;
                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              detection;
                                                                                            51;
                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
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                                                            Gaps
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Garage with a state of

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RESULT 1996
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                                                                                                                                                                                          The present invention relates to oligonucleotides encoding polymorphic cc variants of proteins related to amylases, amyloid proteins, angiopoietin, cc apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, chistones, kinases, colony stimulating factors, complement related proteins, cytochromes, kinasins, cytokines, interferons, interfeukins, Grotein coupled receptors and thioesterases. The present sequence is one cc such oligonucleotide. The oligonucleotides and the peptides encoded by ct them may be used in the prevention, diagnosis and treatment of diseases cc associated with inappropriate expression of the proteins listed above. Clisorders that may be prevented, diagnosed and/or treated include cultifactorial diseases with a genetic component, such as autoimmune cc systemic lupus erythromatosus and Grave's disease), inflammation, cancer (e.g. cancers of the bladder, brain, breast, colon and kidney, carceric corporations), diseases of the nervous system and an infection of pathogenic creations.
                                                                        Matches
                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer amyloid protein; angiopoietin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating fact; complement related protein; cytochrome; kinesin; cytokine; interferon; interleukin; G-protein coupled receptor; thioesterase; inflammation; multifactorial disease; autoimmune disease; infection; nervous system disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAL27794 standard; DNA; 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oncogenes and histones, useful for autoimmune diseases and infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-465210/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shimkets RA, Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-DEC-1999; 99US-0173419P.
27-DEC-2000; 2000US-00173419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000; 2000WO-US035498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human SNP oligonucleotide #1002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-JAN-2002
                                                                                                                                             Sequence 51 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 1666; 4143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CURA-) CURAGEN CORP.
                                   717
                                                                                        Similarity
                                   CCCAGCCTCCTGAGTAGCTGGGACTACAGGCGCCCACCACGCCT 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0173419P
                                                                                                                                             10
                                                                                                                                             A; 13 C; 16 G; 12 T; 0 U; 0 Other;
                                                                                        1.5%;
                                                                      Score 15.2; DB 1;
Pred. No. 2e+03;
0; Mismatches 18;
                                                                                                          Length 51;
                                                                        Indels
                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer;
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               factor;
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RESULT 1997 AAI73760/c

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RESULT 1998
AAI79697
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                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC polynicalectide sequences. The sequences can be used in gene and protein CC therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For CC example, (I) may be used to treat discretes by rectifying mutations or CC deletions in a patient's genome that affect the activity of polypeptides or CC by expressing inactive proteins or to supplement the patients own CC production of polypeptide. Additionally, (I) and its complementary CC sequences may also be used as DNA probes in diagnostic assays to detect CC and quantitate the presence of similar nucleic acids in samples, and CC therefore which patients may be used as antigens in the production of polypeptides encoded by (I) may be used as antigens in the production of CC polypeptides encoded by (I) may be used as antigens in the production of constitution constitution of con
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; single nucleotide polymorphism; SNP; genome; gene ther protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAI73760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-NOV-1999; 99US-0168138P.
29-NOV-2000; 2000US-00726173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-NOV-2000; 2000WO-US032758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-JUN-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAI73760 standard; DNA; 51 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 51 BP; 9 A; 19 C; 13 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptides in samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequences (I), which contain single nucleotide polymorphisms (SNPs).
AAM53114 to AAM53329 represent peptides related to human polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 268; 2653pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphic nucleic acid sequences, useful in genetic testing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shimkets RA,
                        09-NOV-2001
                                                                       AAI79697;
                                                                                                                 AAI79697 standard; DNA; 51 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAI73060 to AAI79867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                               655 TGCAGTGGCGCAATCTTGGCTCACTGCA 682
                                                                                                                                                                                                                                  35
                                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                     TGCAGTGAGCCGAGATTGCATCACTGCA
                                                                                                                                                                                                                                                                                                                             1.5%;
llarity 71.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Leach M;
                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   represent isolated human polymorphic polymucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid SEQ:701
                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                    Score 15.2;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                         2e+03;
                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                               Length 51;
                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy;
                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                Gaps
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Human

conservative amino

acid changing

SNP nucleic acid SEQ:6638

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AAT5211-
ID AAY
XX AC AA
AC AA
DT 25
DT 25
DT 25
XX XX
XX
XX
XX
XX
XX
XX
XX
KW En
KW 96
KW 96
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                                                                                                                                                                                                                                                                                                           RESULT 1999
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AAM53114 to AAM53129 represent peptides related to human polymorphic polymorphi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 26
  Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis facto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; single nucleotide polymorphism; SNP; genome; gene they protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
                                                                                                 Human ICAM
                                                                                                                                               25-MAR-2003
25-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 2537; 2653pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-356160/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shimkets RA, Leach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-NOV-1999; 99US-0168138P.
29-NOV-2000; 2000US-00726173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-NOV-2000; 2000WO-US032758
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                                                                                                                                                                                                                                                                AAT52114 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polymorphic nucleic acid sequences, useful in genetic testing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                1028 AAGCAGCTGGGATTACGGGCACCTGCCACCACCCCCCCCTAATT 1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens.
                                                                                                                                                                                                                                                                                                                                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                     AATTAGCTGGGCGTGGTGGCGGCCGCCTGTAATCCCAGCTACTT 48
                                                                                          hammerhead ribozyme target sequence (nt. position 2860).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                          (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 A; 12 C; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.2; DB
Pred. No. 2e+03;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
11-OCT-1994;
11-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                              06-JUL-1994;
15-AUG-1994;
16-AUG-1994;
17-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome;
                                                                                                                                                                                                                                                                                                                                                               19-AUG-1994
02-SEP-1994
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15-APR-1994
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07-APR-1994
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94US-0030000
94US-00311486
94US-00311749
94US-00316771
94US-00316771
94US-00319492
94US-00319492
94US-00334847
94US-00334867
94US-00334516
                                                                                                                                                                                                                                                                                                                                                                                               94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
94US-00291932.
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94US-00363233.
95US-00380734.
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94US-00224483.
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94US-00218934.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AIDS;
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(RIBO-) RIBOZYME PHARM INC

Grimm S, Modak A, Tracz D, Stinchcomb Karpeisky A, Kisich K, Pavco P, Beigleman L, Usman N, Wincott FE, W Į, Chowrira B, Direnzo A, cenzo A, Draper KG, Dudycz LW;
t, Matulic-Adamic J, Mcswiggen JA;
Sullivan SM, Sweedler D, Thompson
Woolf T; ij;

Ribozymes having modified bases and in inhibiting disease related genes. methods for producing them 1 for use

Claim 2; Page 175; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to

Sequence 15 BP; ω P w ü σ ٥. 0 H ς,

Score 15;

Length 15;

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RESULT 2001
AAF98058
ID AAF9805
XX
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Best Local :
                                                                                                                                               Query Match
Best Local S
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                                                                                                                                   Matches
                                                                                                                                                                                                                           AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                      Use of isolated gene transcripts - useful for developing products diagnosis, prognosis and treatment of cancers, particularly colon pancreatic cancer.
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diagnosis; prognosis; treatment; ss.
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                                                                                                          CATGITGGTCAGGCT 212
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No. 1.6e+03;
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AAF98058 standard; DNA; 15 BP

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Best Local
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                19-JUN-2001
                                              AAF97989;
                                                                            AAF97989 standard; DNA; 15
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Human IGERA allele specific oligonucleotide probe SEQ ID

NO:28

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 Human; polymorphism; immunoglobulin E receptor I alpha subunit; IGERA; single nucleotide polymorphism; SNP; allele specific oligonucleotide;
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                                                     Human IGERA allele specific oligonucleotide probe SEQ ID NO:96
                                                                                         19-JUN-2001
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                                                                 Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha; allergic disease; probe; ss.
                                  Homo sapiens
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serial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENAISSANCE PHARM
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                                                               Kinzler
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                                                                                                           HOPKINS
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Disclosure; Col 13; 161pp; English.
                                                                                              New human nucleic acid containing specific SAGE tags, diagnostic markers for cancer, also derived probes.
                                                                                             diagnostic
                                                                                                        useful
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that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tengprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention relates to an isolated, purified human nucleic acid found in humans and is a SAGE a SAGE Ξ and

Sequence 15 ₿P; 2 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

S Query Match Best Local S Matches 15 198 CATGTTGGTCAGGCT 212 15; Similarity Conservative 100.0%; 0; Score 15; Pred. No. Mismatches 1.6e+03; DB 1; 0 Length 15; Indels 0; Gaps 0

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1 CATGTTGGTCAGGCT 15

RESULT 2006 ADE14250/c 29-JAN-2004 ADE14250; ADE14250 standard; DNA; (first entry) 15

Optineurin promoter motif, repeat element or regulatory region

SNP; glaucoma; progressive ocular hyperte glaucoma related disorder; motif; repeat optineurin; ds; ophthalmological; single nucleotide polymorphism; hypertensive disorder; element; regulatory region

Homo sapiens.

US2003190617-A1

09-OCT-2003.

06-MAR-2002; 2002US-00091281

06-MAR-2002; 2002US-00091281

(SIEE/) (MORI/) SI E. RAYMOND V. MORISSETTE ٩.

Raymond ۷, Morissette ٦ Si Ħ

HPI; 2003-864168/80.

optineurin promoter to New nucleic acid sequences of the optineurin gene are useful to polymorphisms particularly single nucleotide polymorphisms in the diagnose, prognose and treat glaucoma detect

Claim 11; SEQ ID NO 361; 159pp; English

The invention relates to an isolated nucleic acid (N1) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineur promoter appearing as ADE13890. Also included are the optineurin promot operably linked to a heterologous nucleic acid, a nucleic acid capable detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing the promoter operably linked to a heterologous sequence, diagnosing of plaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphi in a promoter region of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing comprising detecting a polymorphism gene, associated with a glaucoma optineurin in promoter capable of

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ADE14031/c
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Matches 15
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The invention relates to an isolated nucleic acid (N1) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; optineurin; ds; ophthalmological; single nucleotide polymorphism; SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid sequences of the optineurin gene are useful to compolymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and
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RAYMOND V.
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RESULT 2008
ACC84465
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Best Local
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                                                                                                                                     Novel neural thread protein peptide, referred as cell death peptide, useful for treating prostatic hyperplasia, psoriasis, eczema, dermat atherosclerosis, cosmetic modification to skin, throat, mouth, muscl
                                                                                                                                                                                                                                                                                          19-JUL-2001; 2001US-0306150P.
19-JUL-2001; 2001US-0306161P.
16-NOV-2001; 2001US-0331477P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytostatic; Antibacterial; Immunosuppressive; Antiinflammatory; neural thread protein; NTP; tumour; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NTP peptide encoding sequence #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC84465 standard;
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                                                                                                                                                                                             P-PSDB; ABR63260
                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                       Averback PA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                             neural thread
                                                                                                                                                                                                                                                                (NYMO-) NYMOX
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Pred. No.
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antibacterial, immunosuppressive and antiinflammatory. It is useful for treating a condition in a patient requiring removal or destruction of cells, for treating a condition such as benign or malignant tumor,

disease, autoimmune disease and infectious

is derived

sequence

treatment

inflammatory

Disclosure; Page 18; 77pp; English.

invention relates to a neural thread

neural thread protein (NTP)
Thought to be cytostatic,

cell death peptide.

referred to as

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RESULT 2009
AAD63090/c
ID AAD6309
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                                                       Query Match
Best Local
                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a pancreatic thread protein. The peptide is conjugated, linked or bound to a molecule chosen from antibody or its fragment, antibody-like binding molecule, where the molecule has a higher affinity for binding to a tumor or other target than binding to other cells. Treatment using NTP peptides can remove benign tumors with less risk and fewer of the undesirable side effects of surgery. The present sequence is an NTP encoding sequence
                                                                                                                mRNAs, amplifying the released tags, concatenating form concatenated tags, amplifying and isolating The present sequence is human tandem tag DNA
                                                                                                                                                                                                                        Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the
                                                                                                                                                                                                                                                                                                                                                                                                                   06-MAR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tandem tag; concatenated tag; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human tandem tag DNA #24.
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                                                                                                                                                                                     Disclosure;
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                                                                                          Sequence 16 BP;
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                                                                                                                                                    tandem
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                                                                                                                                        present invention discloses a method for generating five pridem tag libraries of cDNAs. The step involves isolating a sam As, amplifying the released tags, concatenating the amplified
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15; Conservative
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                                              Conservative
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Pred. No.
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Pred. No.
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RESULT 2010
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ID ADH59602/c
AC ADH5960
XX ADH5960
XX ADH5960
XX NOn-nuc
XX NOn-nuc
XX NOn-nuc
XX NON-nuc
XX Probe
XX O3-APR-
XX (BOST-)
PA (BOST-)
PA (DAKO-)
XX WPI; 20
XX NOn-nuc
PT Non-nu
                       Comprising 5-50 probes), contracting the sample with the one or more comprising 5-50 probes), contracting the sample with the one or more concluded acid of the sample by determining the hybridization of the one or communication acid of the sample by determining the hybridization of the one or communication acid of the sample. The genomic nucleic acid probes to the target genomic nucleic acid of the sample. The genomic nucleic acid is contained in a fixed tissue or a common of the sample is metaphase spreads, interphase nucleic or nucleic found in paraffin embedded tissue material or frozen tissue sections. The grobe is also useful in comparing a sample of genomic nucleic acid with the method comprises treating a sample of genomic nucleic acid and control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array with treated mixture of sample and control genomic nucleic acid and the array to contacting the array with treated mixture of sample and control genomic conditions, concluding the signals from the differential labels of the array to that caused by hybridization of the probe under suitable hybridization conditions, and comparing the sample as compared with the relative copy numbers of sequences in the control. The hybridization of the genomic condition of the genomic nucleic acid with detectable moleic acid/mucleic acid hybrid. The sample as compared with the relative copy numbers of substantially consistence, and the from the detectable moleic acid/mucleic acid hybrid. The sample as conditions of the detectable moleic acid/mucleic acid hybrid. The sample acid are labelled with detectable moleicy such that hybridization of the genomic of the detectable and the reference of amount or location of the detectable moleic acid that is prepared from the one or more genomic array to the control acid that is prepared from a sample of genomic array comprises nucleic acid that is prepared from the one or more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a non-nucleotide probe. The probe is useful for suppressing the binding of one or more detectable nucleic
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         The present sequence represents a non-nucleotide probe. The probe is useful for suppressing the binding of one or more detectable nucleic acid probes, that are greater than 100 base pairs and that have been derived from genomic nucleic acid, to one or more undesired sequences in an assay for determining target genomic nucleic acid of a sample. The method comprises contacting the sample with the one or more undesired sequences in an assay for determining target genomic nucleic acid of a sample. The method comprising 5-50 probes), contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one or more detectable nucleic acid probes to the target genomic nucleic acid of the sample. The genomic nucleic acid is contained in a fixed tissue or a cell, and the sample is metaphase spreads, interphase nucleic or nucleic found in paraffin embedded tissue material or frozen tissue sections. The probe is also useful in comparing a sample of genomic nucleic acid with that of a control sample using a genomic nucleic acid reference array. The method comprises treating a sample of genomic nucleic acid and the array with the mixture of the probe under suitable hybridization conditions, and comparing the intensities of the array with treated mixture of sample and control genomic nucleic acid under suitable hybridization, and comparing the intensities of the signals from the differential labels of the array to that caused by hybridization of the probes to genomic nucleic acid, thus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 10; SEQ ID NO 20; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   homologous to randomly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-SEP-2002; 2002WO-US030573.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   distributed repeat
   variations in
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ΑS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Williams BF;
 copy numbers of sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence of genomic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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RESULT 2012
ADQ3038/c
ID ADQ3038/c
XX ADQ3038
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XX ADQ300
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XX PA WC200
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid that modulates expression of the vanilloid receptor-1, useful for control of pain or sensitivity disorders, comprises sequence from control regions of the receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pain transmission; primary sensory neuron; transcription factor;
detection; MZFl; NFkappaB; NFAT; GATAl; sensitivity disorder; analgesia;
hypalgesia; hyperalgesia; neuralgia; myalgia; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ds; VR1 receptor; vanilloid receptor type 1; modulator;
pain transmission; primary sensory neuron; transcription factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human VR1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CHEF ) GRUENENTHAL GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bieller A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCACCACGCCCGGC
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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segment having at least one region that modulates expression of the VR1 (vanilloid receptor type 1) receptor, or a functional derivative, allele or fragment of this region, or a sequence that hybridises to it under standard conditions. The VR1 modulator is derived from one or more of positions 221931-22334 of GenBank AL670399, 31673-36359 of AL63116, or 44731-43231 or 36616-33151 of AP168787 and is involved in transmission of pain, particularly in primary sensory neurons. The invention also describes a vector that contains the VR1 medulator, host cells containing this vector (other than human germ or embryonal stem cells) and a method for modulator or the vector into a cell that contains the VR1 gene. The modulator of the vector into a cell that contains the VR1 gene. The

products of the

invention are used for detecting a transcription factor

Disclosure; Page 53; 68pp; German.

This invention describes a novel nucleic acid containing a specific

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RESULT 2013
AAA22972/C
ID AAA2297
XX AAA2297
XX AAA2297
XX Integri
XX Integri
XX Human;
XW integri
XX Human;
XW integri
XX Homo sa
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XX WPI; 15
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XX Claim 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipaoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot wine stain; Sturge Weber syndrome; ss. kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA171367 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17625 to AAA17644 represent their corresponding target sequences; AAA17685 to AAA188385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUN-2000
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                                                                                                                                                                                                                                                                                               54; Page 254; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                    ribozymes for modulating the synthesis, mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roberts
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Pred. No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                         expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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RESULT 2014
AAA87041/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA1923 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC AAA21689 to AAA22475 and AAA23476 to AAA2342 represent ribozyme sequence
CC AAA21622 represent their corresponding target sequences. The ribozyme of
CC the invention are used for modulating the synthesis, expression and/or
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, sporiasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Detection; nucleic acid hybrid; depolymerisation; analysis; SNP; single nucleotide polymorphism; identification; viral load; prob genotyping; medical marker diagnostic; primer; target; mutation; genetic disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP;
                                                                                                                                                                     acid sequence by using an enzyme oligonucleotide probe hybridized
                                                                                                                                                                                                                                                                             WPI; 2000-565377/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-FEB-1999;
21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-2000; 2000WO-US004242.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA87041;
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                                                                                                                                                                                                                                                                                                                               Andrews
                                                                                                                                                                                                                                                                                                                                                       Shultz JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200049180-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                       (PROM-) PROMEGA CORP.
                                                                                                                                                     identifier
                                                                                                                                                                             rmining presence or absence of a predetermined endogenous sequence by using an enzyme that depolymerizes the 3' enconnected probe hybridized to a target sequence to releating the probe hybridized to a target sequence to releating the probe hybridized to a target sequence to releating the probability of the probabili
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      776 ATTTTTAGTAGAGAT 790
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                                                                                                                                                                                                                                                                                                                               ξ
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                                                                                                                                                     nucleotides.
                                                                                                                                                                                                                                                                                                                                                       Lewis MK,
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                                                                                                                                                                                                                                                                                                                               Hartnett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00252436.
99US-00358972.
99US-00383316.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 C; 0 G; 0 T; 6
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                                                                                                                                                                                                                                                                                                                               Leippe
JR, Gu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                               ΉÓ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                               Mandrekar M, Kephart
Olson RJ, Wood KV, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 u; o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    load; probe;
mutation;
                                                                                                                                                                                                                                                                                                                                     welch
                                                                                                                                                                               3' end of release
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                               Rhodes
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The present invention describes a method (M1) presence or absence of a predetermined endoges sequence (ENAT). The method comprises hybridi

d endogenous hybridising

determining nucleic acid a probe havi

acid ta having

for

or absence of a (ENAT). The meth

Example;

Page 373; 389pp; English.

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RESULT 2015
ADB04312
ADB0431
AC ADB0431
XX ADB0431
XX DT 20-NOV-
XX Cytoste
KW Zinc fi
KW chromor
KW Zinc fi
KW chromor
XX DEP1281
XX DEP130-JUL
XX DEP14
XX DEP15
XX DEP16
XX DEP16
XX DEP17
X
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Best Local Sim:
Matches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       depolymerises the 3' end of hybridised NA to release the INS. MI is used for determining the number of known sequence repeats present in a nucleic acid target sequence in a nucleic acid sample. The method is also useful for determining whether a nucleic acid target sequence in a sample is an allele from a homozygous or heterozygous locus. The method is also useful for detection of mutations, translocations and SNPs in nucleic acids (including those associated with genetic disease) determination of viral load, species identification, sample contamination, and analysis of forensic samples. AAA86791 to AAA87079 and AAB12817 represent sequence which are used in the exemplification of the present invention. N.B. There is a discrepancy between the SEQ ID NO: and sequences given in the examples, and the SEQ ID NO: and sequence listing
                                                                                                                                                                                                                                                                                                                                                                                             New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP1281758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human MDZ7 scanning oligonucleotide SEQ ID 5298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB04312 standard; DNA; 17 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-FEB-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-NOV-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2003-423107/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gu Y, Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.7e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      MDZ3,
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0;

proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome fsp11.3 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic

proteins are also useful

for diagnosing

유

monitoring a

disease

Sequence 17 BP; 4 A; 1 C;

4 G;

8 T;

0 U;

The present Example 8;

invention relates to novel human

zinc

finger-containing

SEQ ID NO

5298; 103pp; English

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RESULT 2016
ADB0428
ADB0428
AC ADB0428
AC ADB0428
AC ADB0428
AC ADB0428
AC Cytosta
KW Cytosta
KW Zinc fi
KW chromos
KW chromos
KW develop
AX EP12817
AX EP12817
AX EP12817
AX EP12817
AX GAEOM-)
AX (AEOM-)
AX WPI; 2
AX WPI; 2
AX Shannol
AX WPI; 2
AX Shannol
AX Shann
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Best Local S
Matches 15
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                                                                                                                                                              or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
                                                                   useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                         proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disord associated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 developmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; immunostimulant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human MDZ7 scanning oligonucleotide SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  zinc finger protein; MDZ3; MDZ4; MDZ7; chromosome 6p21.3-22.2; chromosome 16p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to novel human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 8; SEQ ID NO 5266; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB04280 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGGAGTGCAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; vaccine; human;
DZ4; MDZ7; MDZ12; chromosome 7q22.1
mosome 16p11.2; chromosome 15q26.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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Similarity

1.5%;

Score 15; Pred. No.

1.7e+03; DB 1;

Length 17;

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ADB04285
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                                                                       Query Match
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Matches 15
                                                                                                                                                                                                                              proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ4, MDZ7, or MDZ12, genetic locus. The probes are material discovery and characterize gross are monitoring microscore and characterize gross are monitoring microscore across a manufacture of the manufacture of the probes are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-AUG-2001; 2001US-00922181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human MDZ7 scanning oligonucleotide SEQ ID 5271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADB04285 standard;
                                                                                                                                                                           useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                              Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; SEQ ID NO 5271; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
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                                                                                        Similarity
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                                    TTTGAGACAGAGTCT 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                         ilarity 100.0%;
Conservative 0;
                                                                                                                                                BP; 4 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nguyen C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                              1.5%;
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                                                                                          Score 15; DB 1; Length 17; Pred. No. 1.7e+03;
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                                                                           Mismatches
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                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MDZ3,
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RESULT 2018
ABZ60369/c
                                                                                                                                                                                                                                                            ABZ60598
ID ABZ6
XX
AC ABZ6
XX
DT 21-W
XX
DE Huma
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                                                                                                           RESULT 2019
                                                                                                                                                                                                        Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                 The invention relates to a novel short interfering RNA (giRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66553 represent substrate/target sequences for the human ribox.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; ribozyme; short interfering enzymatic nucleic acid; H-Ras; N-Ra anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-2001; 2001US-0294140P
06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human K-Ras DNAzyme substrate #481.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ60369 standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                                                                                                                            Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 58; Page 94; 185pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAY-2002; 2002WO-US016840
                                                                                  ABZ60598
                                                                                                                                                                                                                                                                                           ribozymes of the invention
                                                                                                                                                                              595
                                                                                                                                                    15
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                                                                                                                                                                                                                       Similarity
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                                                                                  standard;
                                                                                                                                                                                                                                                               BP; 14 A; 1 C; 0 G;
                                                                                                                                                                                                        larity 100.0%;
Conservative (
                                                                                                                                                                                                                                    1.5%;
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                                                                                                                                                                               609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
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                                                                                                                                                                                                                       Score 15; pred. No.
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                                                                                                                                                                                                                                                                 0 T; 2 U; 0 Other;
                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA; siRNA; HER2; K-Ras;
                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                          1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic;
                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      anti-HIV;
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                                                                                                                                                                                                              Gaps
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Human K-Ras DNAzyme substrate #710.

21-MAR-2003

(first entry)

ABZ60598;

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RESULT 2020
ACC65847
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Best Local S
Matches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59389 - ABZ6216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, according to the human of the first of the formal substrate/target sequences for the human in the control of the first of the substrate acids according to the human of the first of the substrate acids according to the human of the first of the substrate acids according to the human of the first of the first of the human of the first of the first of the first of the human of the first of the first
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enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                      Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; mur tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's dise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                            WO2003025176-A2
                                                                                                Mus musculus
                                                                                                                                                                                                                                                                       Murine oligonucleotide associated with tumour supression, SEQ ID 3094.
                                                                                                                                                                                                                                                                                                                           01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen
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                                                                                                                                            schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                            ACC65847 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       58;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTTGTATTTTAG 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UUUUUGUAUUUUUAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 98; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 3 A; 0 C; 3 G; 0 T; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                        neuroleptic; murine;
                                                                                                                                                                         Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
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RESULT 2021
ACA62876/c
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti) sense reagents, and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                           21-JUL-1999;
25-AUG-1999;
                                                                                                                                                                                                                                                                                                     Repeated nucleic acid detection method,
                                                                                                                                                                                                                                                                                                                              21-AUG-2003
                                                                                                                                                                                                                                                                                                                                                     ACA62876;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 2 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 392; 738pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2002; 2002WO-IB004210
                                              WPI; 2003-479484/45.
                                                                     Mandrekar MN,
                                                                                                                                                                                15-DEC-2000; 2000US-00739909
                                                                                                                                                                                                                              US2003022163-A1
                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                              Repeated nucleic
                                                                                                                                                                                                                                                                                                                                                                             ACA62876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            specifically cancer but also Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to murine oligonucleotides (ACC62754-
                                                                                           (MAND/) MANDREKAR M
(TERE/) TEREBA A.
(SHUL/) SHULTZ J W.
                                                                                                                                                                                                       30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                      532 ATCCTCCTGCCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15;
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                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCTCCTGCCTCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amson R,
                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                      Tereba
                                                                                                                                          99US-00358972.
99US-00383316.
                                                                                                                                                                                                                                                                              acid
                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                     z
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                                                                                                                                                                                                                                                                              detection; human; alu; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                              17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               546
                                                                      Shultz JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15; DB; Pred. No. 1.7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                    human probe Alu2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.

Claim 1; Page

27;

31pp; English

The second second

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В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes a method of determining presence or absence of a CC desired nucleic acid (NA) that contains multiple repeats of a CC predetermined NA target sequence in a NA sample. The method involves convoiding a treated sample that may contain the desired NA in which composed the predetermined repeating NA target sequences are hybridised with a CC several predetermined repeating NA target sequences are hybridised with a CC NA probe, analysing for presence of hybridised NA containing the NA CC probe, and thereby the presence or absence of the desired NA. The method CC is useful for determining the presence or absence of desired nucleic acids that contain multiple repeats of a predetermined NA target CC acids that contain multiple repeats of a predetermined NA target the compositive in length and/or sequence. The methods can be efficiently used for CC distinguishing human and bacterial NA. The method is highly sensitive, CC and enables detection and quantification of the presence of a NA without CC the need to undergo a NA target sequence enrichment step prior to a NA CC hybrid detection step. The method enables rapid and accurate detection of CC a desired NA that contains multiple repeats of a NA target sequence. This cCC sequence represents a probe used to detect the human Alu repeat sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADB43123 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17
                                                                              usetul e.g.
polypeptide
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                  New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                   Telerman
                                                                                                                                                                                                                                                                                     17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                      15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                       WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumour suppression/reversion associated nucleotide
                                                                                                                                                      WPI; 2003-441574/41.
                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTGTCACCCAGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCTGTCACCCAGGC 649
                                                                                                                                                                                   P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 4 A;
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                                                                                                                                                                                                                                                      2001FR-00011981.
                                                                                                                                                                                   Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                   Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
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Pred. No.
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#3446

schizophrenia;

88;

The invention relates to fragments of at least 15 Disclosure; Page 434;

the isolation of 6327 nucleotide sequences, consecutive nucleotides of these nucleotides,

in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or

New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.

associated antibodies

WPI; Telerman

2003-313354/30

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Amson R,

Tuijnder M;

17-SEP-2001; 2001FR-00011980

(MOLE-)

MOLECULAR ENGINES

17-SEP-2002; 2002WO-IB004523

27-MAR-2003

Disclosure; SEQ ID NO 1488; 30pp; French

This invention relates to novel isolated nucleic acid sequences

involved

771pp;

French

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RESULT 2023
ADI48985
ID ADI4898
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cc sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the critical control of the nucleotides, or the complement, or corresponding RNA, of the conficientifying, quantifying and/or amplifying nucleic acids, as in vitro c sense and antisense sequences, of nucleotides involved in tumour c suppression or reversion, apoptosis and or vival resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as c experimental models. The nucleotides (also vectors containing them and c eals containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment c viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can c also be used to screen for their specific interactive molecules, c potentially useful for treating diseases associated with abnormal c expression of the nucleotides.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human
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                                                                                                                                                                                                                                                                                                                                                                 WO2003025177-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tumour suppression; tumour reversion; apoptosis; virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human tumour suppression/reversion-related DNA sequence
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                                                                                                                                                                                                                                                                                                                                                                                               Homo
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                                                                                                                                                                                                                                                                                                                                                                                               sapiens.
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15; Conserv
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Pred. No.
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hes 0;
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RESULT 2024
ADI48613/c
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Best Local Similarity
Matches 15; Conserv
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development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Allzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention.

Note: The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADI48613 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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                                                                                                                                                                                                                                                                                                                                                                                   in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and transfected
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-2001; 2001FR-00011980
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention relates to novel isolated nucleic acid sequences involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/publishedpct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 1116; 30pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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Pred. No.
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Query Match

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/publishedpct_sequences
                                          The invention relates to a novel method for identifying a subject at risk of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a subject at risk of breast cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The current sequence is that of an Extend primer (also described as probe) of the invention which was used to genotype human intercellular adhesion molecule ICAM-1/ICAM-4/ICAM-5 gDNA. ICAM-1 (human rhinovirus receptor;BB2 ;CD54,cell surface glycoprotein P.35) has been mapped to chromosomal position 19p13.2-cn and ICAM-5 been mapped to chromosomal position 19p13.2-cn and ICAM-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CD54; cell surface glycoprotein P3.58; ICAM-4; Landsteiner-Wiener blood group; ICAM-5; telencephalin; chromosome 19p13; ss; primer; PCR; SNP; single nucleotide polymorphism; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                            Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPKIO, KIAA0861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          breast cancer; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Extend primer
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                                                                                                                                                                                                                                                                                  Example 4; Page 84; 289pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-441051/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-NOV-2003; 2003WO-US037948.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Roth RB,
                             been mapped to (
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ntercellular adhesion molecule; ICAM-1; human rhinovirus receptor; BB2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer; PCR; SNP; single
                                                                                                                                                                                                                                                                                                                 a subject.
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                         Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85 used to genotype human ICAM-1/ICAM-4/ICAM-5 SNP
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                             has been mapped to chromosomal position
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Pred. No.
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1.7e+03
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                                                                                                                                                                                                                                                                                                 Primer t63-r2 and t63-f2 (see AAV62682) are based on the 3' untranslated region of the human Tango-63 gene. They were used in mapping studies of the Tango-63 gene. The gene has been mapped on the Stanford Human Genome Center G3 radiation hybrid panel close to marker D8S1734 with a LOD score of 6. This map position is located in the most frequently lost region of chromosome 8 between markers D8S133 and NEFL. Tango-63 is alternatively spliced (see AAV62672-73) to produce the Tango-63d and Tango-63e polypeptides (see AAW79260-61) of the invention. Tango-63 nucleic acids and polypeptides are used in meethods for the diagnosis and treatment of apoptosis-related disorders such as cancer, autoimmune and neurodegenerative disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isolated tumour necrosis factor related proteins - used to develop products for the diagnosis and treatment of apoptosis-related disorders, e.g. cancers, auto:immune disorders or neuro:degenerative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-594562/50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         apoptosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tango-63 primer t63-r2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
AAH47613;
                                  AAH47613 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MILL-) MILLENNIUM BIOTHERAPEUTICS INC
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                                                                                                                           <u>ب</u>
                                                                                                                                                                                              l Similarity 100.0%;
15; Conservative
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                                                                                                                                                  GCTCAAGCGATTCTC 1012
                                                                                                                                                                                                                                                                      18 BP; 4
                                                                                                                           GCTCAAGCGATTCTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour necrosis factor receptor related protein; human; cancer; autoimmune disease; neurodegenerative disease; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 67; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                      A; 6 C; 3 G;
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                                                                                                                                                                                                                                                         AAS13563
                                                                                                                                                                                                                                                                          RESULT 2028
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention provides antisense compounds capable of inhibiting the expression of human Her-3, a member of epidermal growth factor (EGF) family of receptor/tyrosine kinases. The antisense oligonucleotides are useful for inhibiting the expression of Her-3 in cells or tissues. They are commonly used as research reagents and in diagnostics for example, to elucidate the function of particular genes. The antisense compounds are also useful for distinguishing between functions of various members of a biological pathway and for research use. They are also utilized for distinguishing between functions of various members of a biological pathway and for research use. They are also utilized for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense compounds capable of modulating expression of human Her-3, member of epidermal growth factor family of receptor/tyrosine kinases, useful for preventing or delaying infection, inflammation or tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Her-3; epidermal growth factor; EGF; receptor/tyrosine kinase; human; antiinflammatory; cytostatic; antibacterial; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                biological pathway and for research use. They are also utilized for diagnostice, therapeutics, prophylaxis and in kits. They are useful prophylactically, e.g. to prevent or delay infection, inflammation or tumor formation. Sequences AAH47532-47615 represent chimeric antisense phosphorothicate oligonucleotides having 2'-MOE wings and a deoxy gap,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-JUL-2000; 2000US-00630706
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-NOV-2001
                                                                      Human; VMGLOM; glomulin; venous malformation glomangioma; PCR primer; STS; sequence tagged site; PAC 10406; ss.
                                                                                                                                                                                                                                      AAS13563 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-JUL-2000; 2000US-00630706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
   WO200160856-A2
                                                                                                                           PCR primer 1 used
                                                                                                                                                                 17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                    1116 TGGTCTCAAACTCCT 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for the inhibition of Her-3 mRNA expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-535134/59
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                                                                                                                                                                                                                                                                                                                                 TEGTCTCANACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                 (first entry)
                                                                                                                         to amplify PAC 10406 (70 SP6) clone STS sequence.
                                                                                                                                                                                                                                                                                                                                                                                                  100.08;
                                                                                                                                                                                                                                                                                                                                 15
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                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 18;
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RESULT 2029
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XX ADE4370
XX Human K
XX Neurode
KW Neurode
KW Alzheim
KW Chromos
XX Homo sa
YX Homo sa
YX W02003(
XX O3-JUL-
XX 25-OCT-
PR 25-OCT-
PR 08-NOV-
PR 08-NOV-
PR 08-NOV-
PR 08-NOV-
PR 09-NOV-
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Best Local S
Matches 15
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10-APR-2000;
22-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to the isolation of novel human and mouse VMGLOM polypeptides (long form and short form), and the nucleic acid molecules encoding them. VMGLOMs (also referred to as glomulins) are a subtype of venous malformations (VMs) called glomangiomas. In humans, VMGLOM has been mapped to chromosome 1p21-22. VMGLOMs and the nucleic acids encoding for them are useful as a medicament or for incorporation into a diagnostic kit. Such medicaments are useful for preventing, treating or alleviating disorders with a vascular component, particularly where alteration of vascular smooth muscle cell phenotype is needed, e.g. varicosities, cardiopathies or cardiomyopathies, cerebral disorders and cancer. The nucleic acids are also useful in gene therapy. The present sequence for PCR primer 1 is used to amplify PAC 10406 (70 SP6) clone STS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New VMGLOM genes and polypeptides, useful in gene therapy or for preventing, treating or alleviating disorders with vascular component, e.g. varicosities, cardiopathies, cerebral disorders or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-2001
                  08-NOV-2001;
09-NOV-2001;
                                                 25-OCT-2001;
08-NOV-2001;
                                                                                                                                                                                                                                           Neurodegenerative disease; uPA; SNCG; Alzheimer's disease; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-557643/62
                                                                                                25-OCT-2002; 2002WO-US034679
                                                                                                                                                               WO2003054143-A2
                                                                                                                                                                                                                             Chromosome 10;
                                                                                                                                                                                                                                                                                         Human KNSL1 PCR primer, SEQ ID 306.
                                                                                                                                                                                                                                                                                                                         29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                     ADE43701 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence in the methods of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGCCACCACGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGCCACCACGCCC 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 70; 157pp; English.
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2000US-0195777P.
2000EP-00870320.
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    2001US-0338010P.
2001US-0338363P.
2001US-0337052P.
                                                  2001US-0339525P.
2001US-0336929P.
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                                                                                                                                                                                                                             primer; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15; DB 1; Log; Pred. No. 1.8e+03; 0; Mismatches 0;
                                                                                                                                                                                                                                           IDE; KNSL1; LIPA; TNFRSF6;
nootropic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
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RESULT 2030
ABX1128
ID ABX1128
XX ABX1128
XX ABX1128
XX Z9-APR-
XX Human;
KW Human;
KW multipl
KW hyperpr
KW rheumat
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtaine from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from upA (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulindegrading enzyme), KNSLI (Kinesin-like protein 1), LIPA (lyosomal acid lypase), and TNFRSP6 (Tumour Necrosis Factor Receptor-SF6), where the presence of at least one of the allelic variant of one or more polymorphic regions is indicative of a predisposition for or the occurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the occurrence of, and for treating neurodegenerative disease, particularly Alzheimer's disease. The present sequence is a PCR primer, which was use in the method of the invention
                                                                                                                                                                                                                                                                                                                               Human; ss; PCR; inflammation; viral encephalitis; meningitis; multiple sclerosis; stroke; Alzheimer's disease; polycythaemia vera; hyperproliferative myeloid disease; chronic myelogenous leukaemia; HIV infection; autoimmune disease; systemic lupus erythematosus; rheumatoid arthritis; type I diabetes; septic shock; graft rejection; cerebral malaria; cachexia; cardiovascular disorder; angina pectoris; myocardial infarction; hypertension; atherosclerosis; primer; haematologic disease; aplastic anaemia; chronic neutropaenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the presence or absence of an allelic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Tango-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NEUR-)
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      14-NOV-2000; 2000US-00712726
                                                                                                                                                                                                                                                                                                      myelodysplastic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABX11281 standard;
                                                              16-MAR-2001; 2001US-00811088.
                                                                                                                                                                                                                                           Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15
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, Mullin KM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention relates to a method (M1) for determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mapping primer t63-r2.
                                                                                                                                                                                                                                                                                                         syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA; 18
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Sampson AJ,
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                            chromosome
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RESULT 2031
ADE77489
ID ADE7748
XX ADE7748
AC ADE7748
AC ADE7748
XX DT 29-JAN-
XX Tango-6
XX Hochorc
XX Hochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cy thymotaxin (also known as Tango-45), Tango-63d, Tango-637e, Tango-67, or thuchordin polypeptide, including sequences 90% identical to them, compared to a host cell or a non-mammalian host cell containing the novel nucleic acid, the encoded polypeptides (or allelic variants, sequences 90% cidentical or fragments), an antibody or antibody substance that compound that binds with one of the proteins, and identifying a compound that binds with the proteins and/or modulates the proteins' activity. Thymotaxin is a member of the C-C family of chemokines, Tango-63e and -d are members of the tumour necrosis factor superfamily, Tango-67 is a growth factor family member. The Thymotaxin gene is located on human cohromosome 16 and Tango-63 on chromosome 8. The nucleic acid molecules are useful for diagnosing and treating disorders cand polypeptides are useful for diagnosing and treating disorders cand polypeptides are useful for diagnosing and treating disorders compolypeptides are useful for diagnosing and treating disorders complypeptides are useful for diagnosing and treating disorders and polypeptides are useful as inflammation (e.g. viral encephalitis, viral or polypeptides are useful assesse (e.g. viral encephalitis, viral or polypeptides are useful disease (e.g. chronic myelogenous leukaemia or polypeptides are useful assesses (e.g. angina pectoris, myocardial infarction, hypertension or atthretis, type I diabetes, septic shock, e.g. angina pectoris, myocardial infarction, hypertension or cachexia), cardiovascular disorders (e.g. angina pectoris, myocardial infarction, hypertension or polymorphisms in the gene. The methods are useful for identifying compounds that modulate the expression or activity of the polypeptides are useful as primers or probes to detect mutations or polymorphisms in the gene. The methods are useful for identifying compounds that modulate the expression or activity of the polypeptides. The polypeptides are useful as pectoris as a pectorial particular as primers are useful for the polypeptides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18
                                   motor neuron disorder; myopathy; muscle metabolic disease, proliferative disorder; heart disorder; ischaemic heart di
                                                                                                         cerebrovascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PANY/)
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(GEAR/) GEARING D
                                                                                                                                                                                                                                                                                                               29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADE77489 standard; DNA; 18
                                                                                                                                         huchordin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         isolated nucleic acid molecule encoding thymotaxin (Tango-45), Tango, Tango-67e, Tango-67, or huchordin polypeptide, useful for diagnosing treating disorders, e.g. cancer, inflammation, stroke or diabetes.
                                                                                                                                                                         human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                998 GCTCAAGCGATTCTC 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                         chromosome mapping primer #2.
                                                                                                      thymotaxin; Tango-45; Tango 63d; Tango-63e; Tango-67;
Tango-66; brain disorder; inflammation;
cular disease; tumour; skeletal muscle disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ִם
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Α,
                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
       pectoris;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
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ADH54179/
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AC ADH5
XC ADH5
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DT 25-M
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DE Huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC (Tango-45), Tango-63 and Tango-67 are useful to treat disorders of the CC thymotaxin, Tango-63 and Tango-67 are useful to treat disorders of the CC disorders, motor neuron disorders, myopathies, metabolic diseases of the CC disorders, motor neuron disorders, myopathies, metabolic diseases of the CC muscle, diseases and disorders associated with the spleen, lung, CC intestine, colon, liver, kidney, reproductive system, ovaries, placenta CC and huchordin are useful to treat heart disorders such as isohaemic heart CC disorders, atherosclerosis, hypertension, angina pectoris, hypertrophic CC cardiomyopathy and congenital heart disorders such as isohaemic heart CC gancreatic disorders including diabetes mellitus, and testicular CC disorders such as leukopenias, leukocytosis and malignant lymphomas, and cimmune disorders. Tango-63 is useful to treat TNP-related and T cell cimmune disorders. Tango-63 is useful to treat TNP-related and T cell
                                                                                                                                                                                                                     RESULT 2032
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 15
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similar to
huchordin
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14-NOV-2000; 2000US-00712726.
10-JAN-2001; 2001US-00757421.
16-MAR-2001; 2001US-00811088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypertrophic cardiomyopathy; congenital heart disease; cardiovascular disorder; pancreatic disorder; diabetes mellitus; testicular disorder; leukocytic disorder; leukopenia; leukocytosis; malignant lymphoma; immune disorder; TNF-related disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-APR-1997;
26-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-DEC-2002; 2002US-00314410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003125540-A1
                           Human neurodegenerative disease-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 21; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-009153/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Holtzman DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                        ADH54179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cell disorder; chromosome mapping; primer
                                                                                                                                                                                                                                                                                                                                     998 GCTCAAGCGATTCTC 1012
                                                                                                                                                                                                                                                                                          _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acid encode a C-C family chemokine, thymotaxin, two polypeptides to the TNF receptor superfamily, a soluble growth factor and in are useful to treat skeletal muscle, heart, cardiovascular and
                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                        standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽₽;
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gearing DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present sequence
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                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to isolated nucleic acids encoding thymotaxin, Tango-63e, Tango-67 and huchordin (Tango-66)
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; 3
                                                                                                                                                                                                                                                                                             15
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                                                                                                                                                                                                                                                                                                                                                                                                          Score 15;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        represents
                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                             1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                PCR primer SeqID306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tango-63
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
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ADO48722/c
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AC ADO487
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PT 12-AUG
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DE Human:
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KW human;
KW mannos
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                                                                                                                                                                                                                                    Matches
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25-OCT-2001;
02-NOV-2001;
                                                                                                                                                                                                                                                                                                    for or the occurrence of neurodegenerative disease comprising detecting in a target nucleic acid obtained from the subject the presence of an allelic variant of polymorphic regions of human genes selected from urokinase plasminogen activator (uPA), gamma-synuclein (SNCG), insulin degrading enzyme (IDE), kinesin-like protein 1 (KNSL1), lysosomal acid lipase (LIPA) and tumour necrosis factor receptor SP6 (TWFRSF6). The method is useful in determining the presence or predisposition to a neurodegenerative disease, particularly Alzheimer's disease. The present sequence is that of a PCR primer which was used for amplification of a region of the human KNSL1 gene in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human; neurodegenerative disease; urokinase plasminogen activator; uPA; gamma-synuclein; SNCG; insulin degrading enzyme; IDE; kinesin-like protein 1; KNSLI; 1; Y90somal acid lipase; LIPA; kinesin-like protein 1; KNSLI; 1; Y90somal acid lipase; LIPA; tumour necrosis factor receptor SF6; TNFRSF6; Alzheimer's disease; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Determining a predisposition for or the occurrence of neurodegenerative disease, particularly Alzheimer's disease, comprises determining the presence of a polymorphism in the uPA, SNCG, IDE, KNSL1, LIPA or TNFRSF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-NOV-2001;
08-NOV-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
             mannose
                         human;
                                                Human neuropilin 1 (NRP1) extension PCR primer #24.
                                                                         12-AUG-2004
                                                                                                                        ADO48722 standard;
                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to a novel method of determining a predisposition
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bertram
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Becker
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GEHO)
                                                                                                                                                                                                                                              LOCAL
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                                                                                                                                                                                                          730
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            melanoma;
e receptor
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15; Conserv
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                                                                                                                                                                                  GTAGCTGGGACTACA 1
                                                                                                                                                                                                          GTAGCTGGGACTACA 744
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0348065P.
2001US-0336983P.
2001US-0336929P.
2001US-0338010P.
                                                                                                                                                                                                                                                                                BP; 3 A;
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Saunders AJ,
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                                                                                                                                                                                                                                  Conservative
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2001US-0337052P.
2002US-0368919P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-0339525P
                                                                        (first entry)
            single nucleotide polymorphism; SNP; neuropilin 1; NRP1; C type 2; MRC2; extension PCR; primer; ss; genotyping.
                                                                                                                        DNA;
                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                 6 C; 4 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        306;
                                                                                                                                                                                                                                                          1.5%;
                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                       205pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mullin
                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ellliott KJ, Wang
fullin KM, Sampson
                                                                                                                                                                                                                              Score 15; DB 1; Le
; Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                 5 T;
                                                                                                                                                                                                                                                                                 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           comprises determining the
3, IDE, KNSL1, LIPA or TNFRSF6
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                                                                                                                                                                                                                                                         Length 18;
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             Shimkets RA,
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Human;
KW protein
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Homo sa
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HOMO SO14
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SO1-NOV-
PR 30-NOV-
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; single nucleotide polymorphism; SNP; gen protein therapy; vaccine; probe; diagnostic ass quantitation; restorative therapy; polymorphic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           melanoma. The present DNA sequence represents an extension that was used to detect single nucleotide polymorphisms wit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention comprises a method for identifying a subject at risk of melanoma. The invention involves detecting the presence or absence of or more polymorphic variations associated with melanoma in the neuropi (NRP1) or mannose receptor C type 2 (MRC2) genes. The method of the invention is useful for identifying subjects at risk and treating melanoma. The present DNA sequence represents an extension PCR primer that was used to detect single nucleotide polymorphisms within human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying a subject at risk of melanoma, useful for treating comprises detecting the presence or absence of one or more poly variations associated with melanoma in a nucleic acid sample fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-411720/38.
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23-JUL-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3; Page 78; 176pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subject.
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                                                                                                                                                                30-NOV-1999;
29-NOV-2000;
                                                                                                                                                                                                                                                                30-NOV-2000; 2000WO-US032758
                                                                                                                                                                                                                                                                                                                                    07-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                  WO200140521-A2
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                                                                                                   (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RB,
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2003US-0489703P.
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2000US-00726173.
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assay; detection;
hic; ds.
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Leach M;

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RESULT 2035
AAI76817/c
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                                                                                                                                                                                                                                                                                                                                                                               Human; single nucleotide polymorphism; SNP; genome; gene therapy; protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
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29-NOV-2000;
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Claim 1;
                                                 Polymorphic nucleic acid sequences, useful in genetic testing
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                                                                                                                                                        (CURA-) CURAGEN CORP.
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Page 1201; 2653pp; English
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2000US-00726173.
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Pred. No. 2e+03;
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cc polynucleotide sequences. The sequences can be used in gene and protein cc therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases cc associated with inappropriate expression of polymorphic polypeptides. For cc example, (I) may be used to treat disorders by rectifying mutations or cc deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own cc production of polypeptides. Additionally, (I) and its complementary cc and quantitate the presence of similar nucleic acids in samples, and ct herefore which patients may be in need of restorative therapy. The cc polypeptides encoded by (I) may be used as antigens in the production of antibodies specific for polymorphic polypeptides. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic columns and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic columns the production of columns and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic columns the presence and the presence of po
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Best Local &
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AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53114 to AAM53329 represent peptides related to human polymorphic polynucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by
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29-NOV-2000; 2000US-00726173
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                                                                                                                                                 Claim 1; Page 2493; 2653pp;
                                                                                                                                                                                                  therapy.
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Pred. No. 2
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Matches 24;
AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53114 to AAM53129 represent peptides related to human polymorphic polynucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For example, (I) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own production of polypeptide. Additionally, (I) and its complementary
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29-NOV-2000; 2000US-00726173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    may be used in the prevention, diagnosis and treatment of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 CAAAGTGCTGGGATTACAGGCGTGCAGCCGTGCCTGGCC 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGTGAGCTGAGATCACGCCACTGCACTCCAGCCTGGGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      samples
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genetic testing
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RESULT 2038
AAI79093
ID AAI7909
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Best Local S
Matches 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; single nucleotide polymorphism; SNP; genome; gene therapy; protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAI79093 standard; DNA; 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polypeptides in
                                                                                                                                                                                                                                                                                                          Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200140521-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human silent SNP containing nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-NOV-2001
                                                                                                                                                                                                                                                         Polymorphic nucleic acid sequences, useful in genetic testing
                                                                                                                                                                                                                                                                                  WPI; 2001-356160/37.
                                                                                                                                                                                                                                                                                                                                                         29-NOV-2000; 2000US-00726173
                                                                                                                                                                                                                                                                                                                                                                     30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                             30-NOV-2000; 2000WO-US032758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                 (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260 AAGTGCTAGATACAGGACTGGCCACCATGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51 BP; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGAGTTTGAGACCAGCCTGGCCAGCATGGC 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                          Leach M
                                                                                                                                                                                                                                                                                                                                                                      99US-0168138P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; 16 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15; DB : Pred. No. 2e+0: 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acid SEQ:6034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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polymucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For example, (I) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own production of polypeptide. Additionally, (I) and its complementary sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. The polypeptides encoded by (I) may be used as antigens in the production of antibodies specific for polymorphic polypeptides. The antibodies may also be used to down regulate expression and activity. The antibodies may also

sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53114 to AAM53329 represent peptides related to human polymorphic polynucleotide sequences. The sequences can be used in gene and protein

AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide

Claim 1; Page 2356; 2653pp; English

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RESULT 2039
AAQ22632/c
ID AAQ2263
RESULT 2040
AAQ20160/c
ID AAQ2016
XX
AC AAQ2016
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            be used as diagnostic agents polypeptides in samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ22632 standard; DNA; 18
                                                                                                                                                                                          This antisense oligonucleotide was designed to hybridise to the 3'-UTR human ICAM-1 mRNA. The same sequence was synthesised in phosphodiester and phosphorothioate forms. The oligonucleotides were tested for inhibition of ICAM-1 expression on the surface of interleukin-1-beta-stimulated cells in two different cell lines. The phosphodiester oligonucleotide did not inhibit ICAM-1 expression, but the phosphorothioate (P=S) form did. See AAQ22629-Q22631 and AAQ22633
                                                                                                                                                                                                                                                                                                                                                                                                                               14-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-MAR-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                triple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide #4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ22632
                                                                                                                                                                                                                                                                                                             New oligonucleotides hybridisable to cell adhesion modulators treatment and diagnosis of e.g. allograft rejection, cancer, and diagnosis of intercellular adhesion dysfunction.
                                                                                                                                                                                                                                                                                                                                                           WPI; 1992-096579/12.
                                                                                                                                                                                                                                                                                                                                                                                   Bennett CF,
                        AAQ20160 standard;
                                                                                                                                                                     Sequence 18 BP; 4 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
  AAQ20160;
                                                                                                                                                                                                                                                                                       Example 5; Page 39; 75pp; English.
                                                                                                      533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                helix;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         ISIS
                                                                                                                                      Similarity
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                                                                                recreecacercaseere 1
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                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                 Mirabelli
                                                                                                                                                                                                                                                                                                                                                                                                         PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           adhesion molecule-1; inhibitor; phosphorothicate bond;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.
                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00567286
                                                                                                                                                                                                                                                                                                                                                                                                                                                      91WO-US005209
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                         DNA;
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                                                                                                                                      1.5%;
                         18
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                         ₿₽.
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Pred. No. 2e+0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>..</u>
                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  targetted to ICAM-1 3'-UTR (2849-2866).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for detecting the presence of polymorphic
                                                                                                                                      Score 14.8; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 U; 0
                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     426
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                                                                                                                                                 Length 18;
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                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
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                                                                                                                                                                                                                                                                                                                           AIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        deoxyribonucleic acid; major groove; HSV; inverted polarity region; covalent cross-linking group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-linking oligomer 723 to target Herpes Simplex Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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    25-MAY-1990;
                           12-DEC-1991.
                                                 WO9118997-A.
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    90US-00529346
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/mod_base= OTHER
/note= "N-methy1-8-oxo-2'-deoxyadenine"
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/mod_base= OTHER
/note= "N-methyl-8-oxo-2'-deoxyadenine"
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e= "N-methyl-8-oxo-2'-deoxyadenine"
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                                                                                                                  ase= OTHER
"N-methyl-8-oxo-2'
                                                                                                                                                                                                             "N-methyl-8-oxo-2'-deoxyadenine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "N-methyl-8-oxo-2'-deoxyadenine"
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inverted_polarity_region
"see comments"
                                                                        "N-methyl-8-oxo-2'-deoxyadenine"
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RESULT 2041
AAQ34110/c
ID AAQ3411
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Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1992-007480/01.
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14-JAN-1991;
The sequence is that of a bovine microsatellite sequence obtd. screening a library of bovine MboI DNA fragments of between 25 bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out clones cross-hybridised. Assuming independent distribution of
                                                                                                                                                                                                                                                                       genetic
                                                                                                                                                                                                                                                                                                    Sequence of a microsatellite
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02-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New sequence-specific non-photo-activated crosslinking the major groove of duplex DNA and are esp. useful for
                                                                       Polymorphic bovine DNA markers - used mapping, and selective breeding.
                                                                                                                                                                                                           06-AUG-1992.
                                                                                                                                                                                                                               WO9213102-A1
                                                                                                                                                                                                                                                    Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                             AAQ34110 standard;
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                                                                                                     WPI; 1992-284684/34.
                                                                                                                                                                   15-JAN-1991;
                                                                                                                                                                                      15-JAN-1992;
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(first en
                                                  375; 517pp; English.
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91US-00640654
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RESULT 2042
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Best: Local Similarity
Matches 16; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      microsatellites and MboI sites, the frequency of (76)n >9 microsatellites in the bovine genome is estimated at >100, 000. The sequence information for ca. 230 such bovine microsatellites is summarised in the specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro amplification of the corresp. microsatellite (using the program OPTIPRIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of economically important traits esp. in cattle, to allow selective breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN field)
                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                    Herpes simplex virus I; AIDS; modified; HIV; RSV; HPV; malignancy; hepetitis; inflammation; ss.
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07-DEC-1992
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(first entry)
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Pred. No. 1.8e
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CC The synthetic oligomer is capable of forming a triplex at physiological CC pH with a purine rich target sequence by coupling into the major groove of the duplex. The specific target sequence of this oligomer is a herpes CC simplex virus I duplex beginning at nucleotide 10996 contg. a purine-rich CC region concentrated on one chain of the duplex. The oligomer, and others CC like it are useful in diagnosis and therapy of diseases characterised by Specific DNA duplex targets, e.g. respiratory syncytial virus, HIV. CC specific DNA duplex targets, e.g. respiratory syncytial virus, HIV. CC form under mild conditions thus assays may be carried out without CC subjecting the test specimen to harsh conditions. The oligomer contains CC an inverted polarity region formed from an o-xyloso dimer synthon. The CC inking gp. is o-xyloso (nucleotides have the 3' positions of xylose CC sugars linked via the o-xylene ring). Two nucleotides are coupled through CC axylene residue to form the dimer synthon. This additional modifications CC may render the oligomer stable to nuclease activity. The oligomer is able to inhibit gene expression, as verified by in vitro systems. See also CC field 1
                                                                                                                                                                                                                                                                                                                                                                                                       23-NOV-1990;
18-JAN-1991;
08-APR-1991;
17-APR-1991;
17-APR-1991;
17-APR-1991;
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91US-00643382.
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RESULT 2043
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                                                                influenza virus, or for treating inflammatory and neurological disorders caused by phospholipase A2 activity in case of hyper- proliferation, malignancy, cardiovascular disease and snake bite. Oligonucleotides such as these, may be used for inhibiting division of malignant cells by modualting telomere length, which may also retard aging. (Updated on 25-MAR-2003 to correct PN field.)
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04-NOV-1994
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                                            Sequence
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                                                                                                                                                                                      Disclosure; Page 108; 144pp; English.
                                                                                                                                                                                                                            New modified oligo-nucleotide contg guanine of viruses, e.g. HIV, and phospholipase A2 a
                                                                                                                                                                                                                                                              WPI; 1994-135613/16
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                                                                                                                                                                                                                                                                                                                                              29-SEP-1992;
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                                                                                                                                       ences given in AAQ61990-2001 are oligonucleotides which contain stretches and which may be used for inhibiting replication of implex virus (HSV), activity of HIV, human cytomegalovirus or
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                                                                                                                                                                                                                         e.g.
                                              BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                         PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                              92US-00954185
                                                                                                                                                                                                                                                                                                                                                                      93WO-US009297
                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. 18
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        containing
                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Phosphorothionate intersugar linkages"
                                              ð,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
         1.5%;
                                              1 C; 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligomer, #12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            611
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 Score 14.8; I
Pred. No. 1.8e
0; Mismatches
                                               ດ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other;
                                                0 Other;
                                                                                                                                                                                                                            e quartet - inhibits activity and modulates telomere length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
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                       Length 18;
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                                                                                                                                                                                                                                                                                                   Brown-Driver
                                                                                                                                                                                                                             telomere length
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S

533 TCCTCCTGCCTCAGCCTC

Similarity

Conservative

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1.8e+03; ches 2

<u>ب</u>

Indels

0,

Gaps

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RESULT 2044
AAQ44515/c
ID AAQ4451
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SABAAAA
                                                     RESULT 2045
AAQ75025
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                                                                                                                                                   Query Match
Best Local (
                                                                                                                     Matches
                                                                                                                                                                 Antisense oligonucleotides which target human ICAM-1 were synthesised in both the phosphodiester and phosphorothicatte forms. The oligonucleotides are useful to treat diseases which are modulated by changes in intercellular adhesion molecules. This sequence corresponds to nucleotides 2849-2866 of the 3'- untranslated region of the human ICAM-1 coding sequence. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ44515 standard; DNA; 18
       25-MAR-2003
03-AUG-1995
                                                                                                                                                                                                                                        Oligo:nucleotide modulation of cell adhesion - used in the treatment e.g. psoriasis, inflammatory bowel disease or malignant melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ44515;
                                             AAQ75025
                                                                                                                                                                                                                                                                                                               21-JAN-1993;
17-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                             WO9405333-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human intercellular adhesion molecule; ICAM-1; cell adhesion; modulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
26-SEP-1994
                                                                                                                                                   Sequence 18 BP; 4 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                         Claim 15;
                                                                                                                                                                                                                                                                                               (ISIS-) ISIS
                                                                                                                                                                                                                                                                                                                               02-SEP-1992;
                                                                                                                                                                                                                                                                                                                                              27-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                               17-MAR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense oligonucleotide; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligonucleotide which targets human ICAM-1 3'-UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                          .nflammation; psoriasis; malignant melanoma; inflammatory bowel disease;
                                                                                                    533
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                                                                                     18
                                                                                                                    16;
                                                                                                                            Similarity
                                             standard;
                                                                                     TCCTCCCACCTCAGCCTC 1
                                                                                                   TCCTCCTGCCTCAGCCTC 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTCCCACCTCAGCCTC 1
                                                                                                                                                                                                                        Page 49; 101pp; English.
                                                                                                                                                                                                                                                                                Mirabelli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first en
                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                PHARM INC.
      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                              92US-00939855.
93US-00007997.
93US-00063167.
                                                                                                                                                                                                                                                                                                                                               93WO-US008101
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                                             RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                           1.5%;
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opt.
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                                                                                                                            Score 14.8; DB 1
Pred. No. 1.8e+03
                                                                                                                     Mismatches
                                                                                                                                   DB 1;
                                                                                                                                   Length 18
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                                                                                                                     Gaps
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method involves binding the antigen to a solid support and then reacting it with an immunoreactive ligand (L) bound to an oligo; removing any CC unreacted L, and then detecting the presence of the oligo. A similar CC method can be used to detect Abs, in which case the ligand is an oligo-CC labelled Ag. The use of an amplifiable oligo as the label allows Ag or Ab CC to be detected at very low levels. An exemplary oligi is AAQ75024 which CC can be covalently attached by the 5'- terminus to the N-or C-terminal of CC oligo AAQ75024 using disuccinimidyl suberate. Serum samples suspected to CC contain HEV Abs were immobilised on plastic tubes or wells, then CC esparate tube using as primers AAQ75025 and AAQ75026 in 30 cycles of PCR. CC meshed; bound oligo was released with 0.2M glycine and amplified in a CC separate tube using as primers AAQ75025 and AAQ75026 in 30 cycles of PCR. CC The amplification product - AAQ75031 - was treated with uracil DNA CC immoblised oligo-dT. (Updated on 25-MAR-2003 to correct PN field') CX immoblised oligo-dT. (Updated on 25-MAR-2003 to correct PN field')
                                                                                                                        Matches
                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR62941 and AAR62942 are examples of synthetic immunoreactive peptides. They are used in a method for detecting an antigen in a subject. The method involves binding the artiss of synthetic immunoreactive peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Solid phase immunoassay using oligo:nucleotide as label - also new conjugates of oligo:nucleotide coupled to antigenic peptide, partic. diagnosing hepatitis C or E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic oligo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-006819/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-NOV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9426932-A1.
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                                                                                                                                                                                                                                              Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (USSH ) US DEPT HEALTH & HUMAN
Н
                                                                                                                     0;
                                                                                                                                                      Similarity
01 DUUUUUUUUUUUUUUUUU 18
                                                    TTTTATTTTATTTTTTT 445
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                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93US-00061694.
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                                                                                                                                                   1.5%;
                                                                                                                     16;
                                                                                                                                                      Pred.
                                                                                                                                                      Score 14.8; DB 1
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SERVICES
                                                                                                                            Mismatches
                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                   Length 18;
                                                                                                                            Indels
                                                                                                                        0;
                                                                                                                     Gaps
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for

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RESULT 2046
AAT01742/c
Key
                                                                                                            peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1;
endothelial leukocyte; ELAM-1; vascular; VCAM-1; antiinflammatory;
                                                                                                                                                                                                                                                                                                                      AAT01742 standard;
                                             Synthetic.
                                                                                          anticancer;
                                                                                                                                                                               Peptide Nucleic acid oligomer targetting ICAM-1 3'-UTR.
                                                                                                                                                                                                                                                                           AAT01742;
                                                                                                                                                                                                                              L8-DEC-1995
                                                                                          antimetastatic; anti-AIDS; anti-rhinoviral; ss.
                                                                                                                                                                                                                            (first entry)
  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                      DNA;
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AAQ95465/c
ID AAQ9546
XX AAQ9546
XX AAQ9546
XX AAQ9546
XX II-FEB-
XX Primer
XX Primer
XX Primer;
XW primer;
XW polymor
XX Synthet
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                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, coding region, 5' untranslated region or 3' untranslated region of ICAM-1 or ELAM-1, or hybridisable to AUG region, coding region, 5' untranslated region, exon/intron junction region or 3' untranslated region of VCAM-1. The PNAs can be used to target RNA and single stranded DNA (sbDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating callular adhesion and thus as
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AIDS agents and anticancer agents, antirhinoviral agents, anti-
AIDS agents and antiinflammatory agents. They may also be useful as
diagnostics, e.g. as probes for specific mENMAs. PNA oligomers have high
affinity for complementary single stranded DNA. They are also able to
form triple helices in which a first PNA strand binds with RNA or ssDNA
and a second PNA strand binds with the resulting double helix or with the
first PNA strand. The PNAs possess no significant charge and are water
soluble, which facilitates cellular uptake. Further, since they contain
amides of non-biological amino acids, they are biostable and resistant to
enzymatic degradation by proteases. The present sequence targets human
intercellular adhesion molecule-1 (ICAM-1) 3' untranslated region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Page 35; 57pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation, viral infection, cancer etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-090842/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-FEB-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9504749-A1.
                                                primer; polymerase chain reaction; PCR; linkage study; locus; microsatellite marker sequence; automated genotyping; allele;
                                                                                                                                                                                                     AAQ95465
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                    polymorphism;
                                                                                                     Primer Al (Group 4,
                                                                                                                                                                     AAQ95465;
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                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide nucleic acid oligomers hybridising to adhesion molecule genes
                                                                                                                                                                                                                                                                                                                      533
                                                                                                                                                                                                                                                                                       18
                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISIS
                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                     standard; DNA; 18
                                                                                                                                                                                                                                                                                                               TCCTCCTGCCTCAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                           18 BP; 4
                                                                                                                                                                                                                                                                                        TCCTCCCACCTCAGCCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mirabelli CK;
                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHARM INC
                                                                                                                                      (first entry)
                                    detection; Homo sapiens;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9308-00102650
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note = "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                           A; 1 C; 11 G;
                                                                                                     set A) for a human chromosomal marker.
                                                                                                                                                                                                                                                                                                                                                                       1.5%;
                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                         Score 14.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                           2 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                       .8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          DB
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                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                          Length
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Synthetic

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RESULT 2048
AAT30216/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The method aims to provide a collection of highly reproducible microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The MMS are polymorphic, simple sequence repeats and can be used in automated genotyping. esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (ie. a polymorphism. When the MMS show considerable polymorphism (ie. a colfiference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 4 primer pairs care shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers, published size range of the allele and degree of heterozygosity in the population for the markers covered by these primer pairs are not given in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kit for automated genotyping contg. pairs of PCR primers - designed to amplify polymorphic nucleotide repeat sequences, arranged in sets each with a characteristic fluorescence label, useful e.g. in detection of
                                                                                                                          ICAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; E-selectin; vascular cell adhesion molecule-1; VCAM-1; white blood cell; brequinar; vascular endothelium; allograft rejection; immunosuppression; rapamycin; anti-lymphocyte serum; monoclonal antibody; cardiac allograft; therapy; renal allograft rejection; donor-specific transplant tolerance; LFA-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JUN-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-215278/28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-DEC-1994;
                                                                                                                                                                                            Antisense oligonucleotide; human; intracellular adhesion molecule-1; ICAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; E-selectii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYJO ) UNIV
                             modified_base
                                                                               Synthetic
                                                                                                                                                                                                                                                Antisense
                                                                                                                                                                                                                                                                                                                                                 AAT30216 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  702
                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTTATTCTCCTGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGTGATTCTCCTGCCTC 1
                                                                                                                                                                                                                                              oligonucleotide ISIS 1564/1573.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93US-00160837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94WO-US013945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7D-2; 104pp; English.
                                                  Location/Qualifiers
               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 C; 6
"phosphorothicate or phosphodiester backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.8;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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RESULT 2049
AAT94667
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XX PD 04-SEP-
XX PR 01-MAR-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ICAM-1, ELAM-1, and VCAM-1 represent three of the five cell adhesion molecules involved in the adherence of white blood cells to vascular endothelium. These sequences can be used in a composition for treating allograft rejection. The composition contains one of these sequences in combination with an immunosuppressive agent. The immunosuppressive agent used in the compositions is brequinar, rapamycin, anti-lymphocyte serum, a monoclonal antibody against LFA-1 or an antisense oligonucleotide. The such as cardiac or renal allograft rejection. By using these compositions, allograft survival times are extended, and donor-specific transplant tolerance is induced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT30211-T30233, AAT33058-T33112 and AAT36667-T36684 represent antisense oligonuclectides of the invention. These sequences target regions of the coding sequences for human intercellular adhesion molecule-1 (ICAM-1), endothelial leukocyte adhesion molecule-1 (ELAM-1, also known as Eselectin), or vascular cell adhesion molecule-1 (VCAM-1). This sequence targets the 3' untranslated region (nucleotides 2849-2866) of ICAM-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 4 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligo:nucleotide targetted to a nucleic acid sequence encoding ICAM-1, ELAM-1 or VCAM-1 - useful for treating or preventing allo:graft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9615780-A1
   01-MAR-1996;
                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                          AAT94667 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-MAY-1996.
                                 28-FEB-1997;
                                                                  04-SEP-1997.
                                                                                              WO9732023-A1.
                                                                                                                                                            snapdragon;
                                                                                                                                                                         Flavonoid 3' hydroxylase; pigmentation; flower colour; transgenic plant;
                                                                                                                                                                                                             Anchored
                                                                                                                                                                                                                                           27-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5; Page 45; 92pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rejection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1996-268321/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC. (TEXA) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                      533 TCCTCCTGCCTCAGCCTC 550
                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                            poly(T) oligonucleotide polyT-AnchA.
                                                                                                                                                                                                                                                                                                                                                                                       TCCTCCCACCTCAGCCTC 1
                                                                                                                                                            primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stepkowski SM
                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00344155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95WO-US015536
   96AU-00008386
                                 97WO-AU000124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.5%;
                                                                                                                                                                                                                                                                                                            ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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RESULT 2050
AAV07750/c
ID AAV0775
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Best Local
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                                                                                                               Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream region of a polyadenylation sequence. They were used to prime cDNA synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and were also utilised in the PCR amplification of plant cytochrome P450 sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding flavonoid 3' hydroxylase (see AAW35704) was isolated using a differential display approach. This can be used to manipulate the pigmentation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel flavonoid 3'-hydroxylase(s) from flowering plants - and corresponding DNA, used in the manipulation of pigmentation in plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brugliera F,
                      Example 1; Fig 3A; 25pp; English
                                                                                                                                                                                                                                                                                             misc_difference 1.
                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                            phosphorothioate; electrospray ionisation-Fourier transform;
                                                                                                                                                                                                                                                                                                                                                                                                    Phosphorothicate oligodeoxynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                               02-DEC-1998 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               750/c
AAV07750 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), (AAT94668) and polyT-anchG (AAT94669) are complementary to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; Page 59; 234pp; English.
                                                 electro-spray ionisation.
                                                            Determining the nucleotide sequence
                                                                                       WPI; 1998-520830/44.
                                                                                                                                                                    14-MAR-1997;
                                                                                                                                                                                                                                             WO9840520-A1
                                                                                                                                                                                                                                                                                                                                                             mass spectrometry; off-resonance excitation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV07750;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-448691/41.
                                                                                                                                                                                            12-MAR-1998;
                                                                                                                                         (HYBR-) HYBRIDON INC
                                                                                                                                                                                                                       L7-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FLOR-) FLORIGENE LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
les 16; Conserv
                                                                                                                BH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        429 TITATTITATTITITA 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTTTTTTTTTTA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            plants
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Holton TA,
                                                                                                                                                                    97US-0040717P
                                                                                                                                                                                             98WO-US004919.
                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. .18
                                                                                                                                                                                                                                                                        note=
                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA; 18
                                                                                                                                                                                                                                                                       "phosphorothioate internucleotide linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Michael MZ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                               유
                                                               മ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .8e+03;
                                                               nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                               acid analyte - using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyT-anchC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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The invention relates to an analytical method for determining the

nucleotide sequence of nucleic acid analytes, including chemical modified oligonucleotides. This new method utilises electrospray

including chemically

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RESULT 2051
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ionisation-Fourier transform mass spectrometry. The ions are excited by sustained off-resonance excitation with single shot excitation, and the target fragmented by collisionally activated dissociation by a neutral gas, e.g. carbon dioxide. Alternatively, the excitation and dissociation can be nozzle skimmer dissociation. The method is used in molecular biology and biomedical applications. The method, utilising electrospray ionisation-Fourier transform ion cyclotron resonance mass spectrometry, is extremely rapid and acts directly on the oligonucleotide. The method is effective for a variety of nucleic acid analytes, particularly chemically modified oligonucleotides which have not previously been successfully sequenced. The present sequence represents a phosphorothioate oligodeoxymucleotide
This antisense oligonucleotide is nuclease resistant and can be used in the treatment of animals, including humans, having a bacterial infection. The treatment comprises administration of such nuclease resistant oligonucleotides, targeted to a nucleic acid or protein of the bacterium, and formulated with a carrier. A compound comprising this nuclease resistant oligonucleotide can be covalently linked to an antibiotic. The method is used to treat infections by a wide variety of Gram-positive and Gram-negative, or acid-fast, bacteria, in human and veterinary medicine. The methods are particularly used in immuno-compromised individuals (e.g. patients with acquired immunodeficiency syndrome or those receiving
                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                  Treating bacterial infections in humans or animals with oligo:nucleotide(s) - resistant to nuclease and targetted to bacterial nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     veterinary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nuclease resistant; bacterial infection; antibiotic; target;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nuclease resistant antisense oligo NBT 13 targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUL-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV21970 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                   with
                                                                                                                                                                                                                                                                                                                                                                                                                                 24-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bacterial control; ss.
                                                                                                                                                                                                                                                                                                                         WPI; 1998-120687/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9803533-A1.
                                                                                                                                                                                                                                                                                                                                                                                                  (OLIG-)
                                                                                                                                                                                                                                   antibiotics.
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                                                                                                                                                                                                                                                                                                                                                          P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                49; Page 87; 163pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                  OLIGOS ETC &
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                                                                                                                                                                                                                                                                                                                                                          Dale RMK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   medicine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00685575
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; 0 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treatment; human;
                                                                                                                                                                                                                                                                                                                                                                                                  OLIGOS
                                                                                                                                                                                                                                                                                                                                                            Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             °;
                                                                                                                                                                                                                                                                                                                                                                                                  THERAPEUTICS
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                              H
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   industrial process;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
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Conservative

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AAX19943
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Best Local 9
                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotides are specific for bacteria, without affecting metabolism in mammalian cells. They may also activate RNase H and have a general, non-specific immune-stimulating effect. The oligonucleotides can be administered orally, intranasally, rectally, topically or by injection, optionally coupled to an agent (e.g. carbohydrate or polyamine) that enhances cellular uptake
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemotherapy or radiation therapy), optionally in combination with, or fused to, antiviral or other antimicrobial oligonucleotides. Apart from therapeutic use, the oligonucleotides can be used to control bacteria in laboratory cultures, foods, beyerages and industrial processes. The
                                                                                                                             A method has been developed for labelling an oligonucleotide having a repeated sequence of (XY)n (where X and Y consists of a combination of adenine and thymine or uracil or guanine and cytosine, and n is an integer of 1 or more ) at the 3'-terminal side in which the repeated sequence is added and extended using a labelled body of the nucleotide constituting the repeated sequence and a DNA polymerase lacked in 5' to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequenče
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUN-1999
                                                           Sequence
                                                                                            3' exonuclease activity. The method can be used for detecting a method can detect a gene in a sensitivity up to ten times higher prior art methods. The present sequence represents a primer used
                                                                                                                                                                                                                                     Example 1; Page 7; 10pp; Japanese
                                                                                                                                                                                                                                                             Labelling
                                                                                                                                                                                                                                                                                         WPI; 1999-257710/22
                                                                                                                                                                                                                                                                                                                                                                        10-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                              JP11075880-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primer; oligonucleotide; labelling; detection; self-priming;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer SEQ ID NO:3 from JP11075880.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX19943;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX19943 standard;
                                                                                    example
                                                                                                                                                                                                                                                                                                                                               14-JUL-1997;
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                                                                                                                                                                                                                                                                                                                    (KAGA )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         428 TTTTATTTTATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
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                                                                                     from
                                                                                                                                                                                                                                                                                                                    ZH KAGAKU &
                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                           18
                                                                                                                                                                                                                                                                of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                           BP; 0
                                                                                    the present invention
                                                                                                                                                                                                                                                                an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry
                                                                                                                                                                                                                                                                                                                                               97JP-00205378
                                                                                                                                                                                                                                                                                                                                                                        98JP-00195719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 A;
                                                                                                                                                                                                                                                                oligonucleotide -
                                                         A; 0 C; 0 G; 18 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                    KESSEI RYOHO KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 C; 0
                   88.9%;
                                 .58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 14.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred.
                     Score 14.8;
Pred. No. 1.
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        Mismatches
                                                                                                                                                                                                                                                                 useful for
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U;
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                       8e+03
                                 DB 1;
                                                            0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ب</u>
                                                                                                                                                                                                                                                                 detecting
        2;
                                 Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
         Indels
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        Gaps
                                                                                                     in an
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RESULT 2053
AAX19942/c
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                             A method has been developed for labelling an oligonucleotide having a repeated sequence of (XY)n (where X and Y consists of a combination of adenine and thymine or uracil or guanine and cytosine, and n is an integer of 1 or more) at the 3'-terminal side in which the repeated sequence is added and extended using a labelled body of the nucleotide constituting the repeated sequence and a DNA polymerase lacked in 5' to 3' exonuclease activity. The method can be used for detecting a gene. The method can detect a gene in a sensitivity up to ten times higher than prior art methods. The present sequence represents a primer used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX19942 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                              Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-257710/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP11075880-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX19942;
        18-JUL-1997;
                                                       JP11032765-A
                                                                                                                          RT-PCR
                                                                                                                                                 11-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                    example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 7; 10pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer SEQ ID NO:2
                                09-FEB-1999.
                                                                                                   RT-PCR primer;
                                                                                                                                                                                              AAX18372 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Labelling of an oligonucleotide - useful for detecting genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO
                                                                                                                                                                                                                                                                           428
                                                                                                                                                                                                                                                     18
                                                                                                                        primer
                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                           TTTTATTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                                              BP; 18 A; 0 C; 0 G; 0 T; 0 U;
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                (first entry)
                                                                                                                         of the invention SEQ ID 13.
                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97JP-00205378
          97JP-00208312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98JP-00195719
                                                                                                   sequence determination;
                                                                                                                                                                                              DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  from JP11075880.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                           1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           labelling; detection; self-priming; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                            445
                                                                                                                                                                                                                                                     \vdash
                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                           Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                            1.8e+03;
                                                                                                                                                                                                                                                                                                                        DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                  gene
                                                                                                  sequence analysis;
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88
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RESULT 2055
AAZ27846/c
ID AAZ27846 standard;
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5-(alpha)n-beta -N3', or (X)m5-(gamma)k-delta-N3', where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene
                                                                                                                                                                                                                                                                                                                     ITR sequence; pentanucleotide tandem repeat; stutter artifact; DNA typing; DNA profiling; linkage analysis; criminal justice; paternity testing; animal lineage analysis; microsatellite loc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 2 A; 0 C; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 11; 19pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-JUL-1997;
                                                                                                                                                           04-FEB-1998;
                                                                                                                                                                                      04-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                        PCR primer for human DNA marker clone S110.
                                                                                                                                                                                                                                                                                                                                                                                                                    23-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ27846;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TAKI
                                    DNA profiling.
                                                                             WPI; 1999-590696/50
                                                                                                       Schumm
                                                                                                                                                                                                               12-AUG-1999.
                                                                                                                                                                                                                                           WO9940194-A1.
                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                            Tandem repeat sequence; DNA isolation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptides
                                                                                                                                                                                                                                                                   domo sapiens.
                                                                                                                                                                                                                                                                                                        polymorphism
                                               solating DNA containing intermediate tandem repeat sequences, useful
                                                                                                                                  (PROM-) PROMEGA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           430 TTATTTTATTTTTTTTAA 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) TAKARA SHUZO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \vdash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTTTTTTTTTTTAA 18
                                                                                                      Bacher JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97JP-00208312
                                                                                                                                                           98US-00018584
                                                                                                                                                                                      99WO-US002345.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G; 16 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              new nucleotides - useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;;
                                                                                                                                                                                                                                                                                                                                                                intermediate tandem repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                     in
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Claim 30; Page 22;

111pp;

English

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RESULT 2056
AAZ87161/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC hybridization selection, and comprises: (a) providing several DNA CC fragments, at least one of which contains an ITR sequence, a region of the DNA fragment which contains at least one repeat unit consisting of a sequence of five, six or seven bases repeated in tandem at least two CC times; (b) providing a stationary support having at least two CC cincence of nucleotides which is complementary to a portion of the ITR sequence of nucleotides which is complementary to a portion of the ITR CC conditions where the DNA fragments with the support under CC conditions where the DNA fragments with the support under CC used to isolate DNA containing the DNA fragment containing CC used to isolate DNA containing pentanucleotide tandem repeat sequences as CC well as to detect target ITR DNA sequences having a low incidence of CC stutter artifacts (no more than 2.4%). The method is useful in DNA CC profiling for linkage analysis, criminal justice, paternity testing and CC the lineage of horses, dogs and other prize animals. The invention overcomes problems related to the use of microsatellite loci in DNA profiling. The method can detect polymorphisms with a low incidence of containing the content of loci. The development of markers based on larger callelic content of loci. The development of markers based on larger called to the sequence aparation of the fragments on the sequence of more loci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence method of the containing an
                                                                                                                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beta-D-arabinose; antisense; reverse transcription; viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ87161 standard; RNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      electrophoretic gels. This allows the simultaneous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligoarabinonucleotide SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ87161;
WPI; 2000-160584/14.
                                                                                                                                                                                                                                                                                                    WO9967378-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   triple helix
                                                  Damha MJ, Parniak MA,
                                                                                                                                                      19-JUN-1998;
                                                                                                                                                                                                  17-JUN-1999;
                                                                                                                                                                                                                                                       29-DEC-1999
                                                                                                    (UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGTCACCCAGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTGTCACCCAGACTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   formation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              is a PCR primer for a human DNA marker clone used in invention. The method is for isolating a fragment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       intermediate tandem repeat (ITR) sequence using
                                                                                                                                                   98CA-02241361
                                                                                                                                                                                                     99WO-CA000571.
                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .18
                                                                                                                                                                                                                                                                                                                                                        note=
                                                                                                                                                                                                                                                                                                                                                                                *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                                                                                                                                      "Ribose moiety replaced by beta-D-arabinose"
                                                  Noronha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inhibition; transcription; expression;
replication; RNase H cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                  Wilds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.8e+03;
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                                                    Borkow
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         analysis of more loci
                                                  Ō
                                                       Arion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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include arabinose sugars, particularly for inhibiting viral replication.
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Example 1; Page

29; 91pp; English

inhibit retroviral replication. The oligoarabinonucleotides can also be used, in combination with RNase H, as reagents for sequence-specific cleavage or RNA mapping, and additionally for the study and control of gene expression in cells. The oligoarabinonucleotides have excellent affinity for RNA, increased resistance to nucleases and show little if any non-specific binding to cellular or serum proteins. They target as RNA, but not complementary ss DNA, so may be useful for targetting retroviral genomic RNA to inhibit the early stages of viral replication. Oligoarabinonucleotides containing pyrimidine bases form triple helices with significantly higher thermal stability than those produced by norma oligoarabinonucleotides. Sequences AAZ87160-287164 represent oligoarabinonucleotides containing beta-D-arabinose used in an exemplification of the present invention oligoarabinonucleotides are used for antisense inhibition of gene expression or to prevent DNA replication, or reverse transcription of RNA by retroviruses. The compositions are therefore particularly used to can hybridise to either a a single-stranded (ss) RNA to induce I cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a leading, thereby inhibiting DNA replication and/or transcription. The invention relates to a new composition for selective, se specific inhibition of gene transcription and expression in composition comprises oligonuclectides containing arabinose ression in a host. The arabinose sugars that a triple

88888888888888888888888888888888

Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Matches Query Match Best Local 428 TTTTATTTTATTTTTTT 445 18 16; Similarity TTTTTTTTTTTTTTTT Conservative 1.5%; , 88.9%; 0; Score 14.8; DB 1 Pred. No. 1.8e+03 Mismatches DB 1; 2 Length Indels 0 Gaps 0

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RESULT 2057
AAZ87162
Oligoarabinonucleotide SEQ ID NO:3.
                                                                                   08-MAY-2000
                                                                                        AAZ87162;
                                                                                               AAZ87162 standard; RNA; 18
                                                                                  (first entry)
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triple helix Beta-D-arabinose; antisense; Beta-D-arabinose; antisense; inhibition; transcription; expression; reverse transcription; viral replication; RNase H cleavage; formation; ss.

modified_base

Synthetic

Location/Qualifiers /*tag= a
/note= "Ribose moiety replaced by beta-D-arabinose" . 18

29-DEC-1999. WO9967378-A1

17-JUN-1999; 99WO-CA000571

19-JUN-1998;

Damha MJ, (UYMC-) UNIV Parniak MA, MCGILL. Noronha AM, Wilds C,

Borkow

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Arion

Ä

WPI; 2000-160584/14

Therapeutic composition containing antisense oligonucleotides that

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Best Local S
Matches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inhibit retroviral replication. The oligoarabinonucleotides can also be used, in combination with RNase H, as reagents for sequence-specific cleavage or RNA mapping, and additionally for the study and control of gene expression in cells. The oligoarabinonucleotides have excellent affinity for RNA, increased resistance to nucleases and show little if any non-specific binding to cellular or serum proteins. They target ss RNA, but not complementary ss DNA, so may be useful for targetting retroviral genomic RNA to inhibit the early stages of viral replication. Oligoarabinonucleotides containing pyrimidine bases form triple helices with significantly higher thermal stability than those produced by normal oligoarabinonucleotides. Sequences AAZ87160-Z87164 represent oligoarabinonucleotides containing beta-D-arabinose used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Therapeutic composition containing antisense oligonucleotides that include arabinose sugars, particularly for inhibiting viral replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple helix, thereby inhibiting DNA replication and/or transcription. The oligoarabinonucleotides are used for antisense inhibition of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 29; 91pp; English
                                                                                                                                                                                                                                                                                                                                 2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
transcription; expression; reverse transcription; viral rep
RNase H cleavage; triple helix formation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      composition comprises oligonucleotides containing can hybridise to either a a single-stranded (ss)
                Damha MJ,
                                                                                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                                                                                                                                                                 Deoxyarabinonucleotide SEQ ID NO:7.
                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ87166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ87166 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression or to prevent DNA replication, or reverse transcription of RNA by retroviruses. The compositions are therefore particularly used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates
                                              (UYMC-) UNIV MCGILL.
                                                                                                            17-JUN-1999;
                                                                                                                                            29-DEC-1999
                                                                                                                                                                        WO9967378-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specific inhibition of gene transcription and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428 TITTATTTTATTTTTTT 445
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 0; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parniak MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                             98CA-02241361
                                                                                                            99WO-CA000571
                                                                                                                                                                                                     /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
fluoro-beta-D-arabinose"
                                                                                                                                                                                                                                     /*tag=
                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 0 C; 0 G; 0 T; 18 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.0%;
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                Noronha AM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     new composition for selective,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
                Wilds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 Other;
              'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expression in a host.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
                Borkow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ression in a host. The arabinose sugars that
                                                                                                                                                                                                                                                                                                                                                 viral replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       င်
           ຸດ
              Arion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
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RESULT 2059
AAZ87167/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC oligoarabinonuclectides are used for antisense inhibition of gene carpression or to prevent DNA replication, or reverse transcription of RNA CC by retroviruses. The compositions are therefore particularly used to cinhibit retroviral replication. The oligoarabinonuclectides can also be CC used, in combination with RNase H, as reagents for sequence-specific CC cleavage or RNA mapping, and additionally for the study and control of CC gene expression in cells. The oligoarabinonuclectides have excellent CC affinity for RNA, increased resistance to nucleases and show little if CC any non-specific binding to cellular or serum proteins. They target ss CC RNA, but not complementary ss DNA, so may be useful for targetting CC coligoarabinonucleotides containing pyrimidine bases form triple helices CC with significantly higher thermal stability than those produced by normal CC oligonucleotides. Sequences AZEP165-ZEP169 represent CC oligodeoxyarabinonucleotides containing 2'-deoxy-2'fluoro-beta-D-CC arabinose used in an exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                can hybridise to either a a single-stranded (ss) RNA to induce RNase leavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple helix, thereby inhibiting DNA replication and/or transcription. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a new composition for selective, se specific inhibition of gene transcription and expression in composition comprises oligonuclectides containing arabinose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Therapeutic composition containing antisense oligonucleotides that include arabinose sugars, particularly for inhibiting viral replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-160584/14.
                                                                                                                                                                                                                                                                                                                                           transcription; expression of the RNase H cleavage;
                                                                                                                                                                                                                                                                                                                                                                                 2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ87167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ87167 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 31; 91pp; English.
                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                   Deoxyarabinonucleotide SEQ ID NO:8.
                                                    19-JUN-1998;
                                                                                                                           29-DEC-1999.
                                                                                                                                                                                                                                                    modified_base
               (UYMC-) UNIV MCGILL
                                                                                                                                                              NO9967378-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428 TITTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                             expression; reverse transcription; viral replication; ye; triple helix formation; ss.
                                                    98CA-02241361
                                                                                       99WO-CA000571.
                                                                                                                                                                                               /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
fluoro-beta-D-arabinose"
                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.8; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a host. The sugars that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
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RESULT 2060
AAZ48898/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used, in combination with RNASE H, as reagents for sequence-specific cleavage or RNA mapping, and additionally for the study and control of gene expression in cells. The oligoarabinonucleotides have excellent affinity for RNA, increased resistance to nucleases and show little if any non-specific binding to cellular or serum proteins. They target ss RNA, but not complementary ss DNA, so may be useful for targetting retroviral genomic RNA to inhibit the early stages of viral replication. Oligoarabinonucleotides containing pyrimidine bases form triple helices with significantly higher thermal stability than those produced by normal oligonucleotides. Sequences AAS07165-287169 represent oligodeoxyarabinonucleotides containing 2'-deoxy-2'fluoro-beta-D-arabinose used in an exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specific inhibition of gene transcription and expression in a host. The composition comprises oligonucleotides containing arabinose sugars the can hybridise to either a a single-stranded (ss) RNA to induce RNase to cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple helix, thereby inhibiting DNA replication and/or transcription. The oligoarabinonucleotides are used for antisense inhibition of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression or to prevent DNA replication, or reverse transcription of RNA by retroviruses. The compositions are therefore particularly used to inhibit retroviral replication. The oligoarabinonucleotides can also be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Therapeutic composition containing antisense oligonucleotides that include arabinose sugars, particularly for inhibiting viral replication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Damha MJ,
                                                                                                                                                                                                                                                                                            Antisense inhibitor; human; ICAM-1; intercellular adhesion molecule-1; vcascular cell adhesion molecule-1; hyperproliferative disorder; vCAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; skin condition; cancer; viral infection; tumour; diapedesis; graft versus host disease; arthritis; infection; autoimmune disorder; multiple sclerosis; stroke; juvenile diabetes mellitus; arthritis; myasthenia gravis; therapy; pemphigus vulgaris; systemic lupus erythematosus; acute myocarditis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a new composition for selective,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ48898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ48898 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAR-2000
                     27-MAY-1998;
                                                                   26-MAY-1999;
                                                                                                                  02-DEC-1999
                                                                                                                                                        WO9961462-A1
                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                           cardiovascular disorder; dilated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            428
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense inhibitor, ISIS #1564.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                   99WO-US011548.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English
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Pred. No. 1.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ត</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 T; 0 U;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; LL
1.8e+03;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ó
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence-
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Sequence 18

BP; 4 A; 1 C; 11 G; 2 T; 0 U; 0 Other;

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cc antisense oligonuclectides are targeted to a nucleic acid encoding a cellular adhesion molecule (CAM) and is capable of modulating the CC empression of the CAM. They particularly inhibit intercellular adhesion completed to a nucleic acid encoding a cemposal of the CAM. They particularly inhibit intercellular adhesion of the CAM. They particularly inhibit intercellular adhesion completed to intercellular adhesion molecule—1 (CAM-1), or coligonuclectides can be used to modulate CAM activity in mediating considerable can be used for modulate CAM activity in mediating considerable can be used for modulating the synthesis of a CAM. Coligonucle can be used for modulating the synthesis of a CAM. Coligonucle to a disease or condition associated with a CAM. Oligonuclectides can be used for treating an inflammatory disease or condition e.g. inflammatory bowel disease such as Crohn's disease, colitists or ulcerative colitis, a condition of the skin, e.g. psoriasis or cytotoxic dermatitis, rheumatoid arthritis, allograft rejection, cancer, pneumonia, multiple sclerosis or a viral infection. The ICAM-1 sequences can also be used for reducing corticosteroid use in a patient or for reducing cyclosporine use in a patient. The oligonuclectides can also be used for detection and diagnosis. They can also be used for treating e.g. thyperproliferative disorders, tumours, diapedesis, graft versus host chyperaris, systemic lupus erythematosus, cardiovascular disorders, pemphigus conformations, ischaemia/reperfusion injury, dilated cardiomyopathy, acute myocarditis, ischaemic heart disease or stroke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides, used for treating e.g. inflammatory conditions, psoriasis, graft rejection, cancers, infections, cardiovascular disorders or autoimmune disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 10; Page 174; 199pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence is an antisense oligonucleotide of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mirabelli
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RESULT 2061
AAC60960/c
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                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                   Query Match
                                                                              Short tandem repeat; primer; STR; susceptibility; HIV; i detection; polymorphism; interleukin 10 promoter; IL-10; chromosome position 4q12; group-specific component; ss.
                                                                                                                    Group-specific component short tandem repeat primer SEQ ID NO:20
                                                                                                                                                                              AAC60960 standard; DNA; 18
                                             WO200061811-A2
                                                               Homo sapiens.
                                                                                                                                         13-FEB-2001
                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                              533 TCCTCCTGCCTCAGCCTC
                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                 1 Similarity
                                                                                                                                                                                                                             TCCTCCCACCTCAGCCTC 1
                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                               550
                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                           Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                           .8e+03;
                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                                                                                                    Indels
                                                                                                     infection;
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                                                                                                      AIDS;
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06-APR-2000; 2000WO-US009355

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for predicting susceptibility to III infection or HIV progression in a subject. The method involves detecting a polymorphism in a human interleukin-10 (II-10) promoter, where the presence of the polymorphism indicates susceptibility to HIV infection or HIV progression. The method provides prognostic information to persons infected with HIV virus and is useful to help select treatments (such as administration of II-10 or gene therapy with II-10). The presence of polymorphism is useful as predictor that very aggressive treatment could substantially eradicate the virus from the infected person. The method is useful for the generation of normograms or other predictive algorithms that can be used, in association with allele status, to prognose probable survival or years to development of AIDS following HIV serconversion. It indicates that increased expression of the II-10 gene helps to reduce HIV-1 infection and pathogenic progression and enables a variety of new therapeutic interventions in the treatment of HIV disease. The present sequence represents a short tandem repeat (STR) primer which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                          antidiabetic; immunosuppressive; antiasthmatic; antirheumatoid; antibacterial; osteopathic; cerebroprotective; vascuropic; antiulcer; nootropic; neuroprotective; congestive heart failure; myocarditis; hypertrophic cardiomyopathy; angina pectoris; myocardial infarction; kidney disease; acute renal failure; renal glucosuria; renal infarction; polycystic kidney disease; hereditary nephritis; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Predicting susceptibility to HIV infection or progression useful for selection of therapeutic treatment for persons infected with HIV virus, comprises detecting polymorphism in human interleukin-10 promoter.
                                                                                                                                                                             tumour angiogenesis; osteoarthritis; toxic shock syndrome; psoriasis; stroke; neural trauma; cerebral malaria; Crohn's disease; osteoporosis; ulcerative colitis; Alzheimer's disease; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                    Rat; secreted factor; clone P00188_D12; cardiant; antiinflammatory; antiarrhythmic; antiarteriosclerotic; antiatherosclerotic; nephropathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-687051/67
                 27-SEP-2000; 2000WO-US026544.
                                                         05-APR-2001.
                                                                                                                                         Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide #6 used for the preparation of normalised cDNA libraries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAD03565 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 11; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (USSH ) US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEPT HEALTH & HUMAN SERVICES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC hypertrophic cardiomypathy, angina pectoris, myocardial infarction, cardiac arrhythmia, arteriosclerosis, kidney diseases such as acute renal cardiacy, renal glucosuria, renal infarction, nephrogenic diabetes consisted in the properties and inflammatory diseases such as asthma, excitentifis and confidence, reural trauma, psoriasis, cerebral malaria, osteoporosis, chematoid arrhritis, osteoportriis, toxic shock syndrome, contains, stroke, neural trauma, psoriasis, cerebral malaria, osteoporosis, crohn's disease, ulcerative colitis, Alzheimer's disease. Secreted protein DNA is useful in antisense-mediated gene inhibition and in gene cherapy. An array comprising one or more oligonucleotides complementary contecting cardiac, kidney and inflammatory disease. The present DNA sequence is an oligonucleotide which is used in the preparation of a commalised cDNA libraries are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails secreted factor DNAs. The normalised contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails are used in the identification of differentially expressed contails.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The patent discloses novel secreted factor protein encoded by clone P00188 D12. The secreted factor is differentially expressed in certain disease states. Secreted protein, its antibodies, antagonists or compositions comprising them are useful in the diagnosis and treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel secreted factor encoded by clone P00188D12 which is expressed in certain disease states, useful in diagnosing cardiac, renal or inflammatory diseases.
                                                                                                                                                                                                                                                                                                  Scaffold protein; antibody mimic; fibronectin type randomised loop; randomised beta-sheet; diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stanton LW, Kapoun
                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide A18-2PEG linker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cardiac diseases such as congestive heart failure, myocarditis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 42; 71pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                         Location/Qualifiers
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                                                                                                                                  "Linked to (PEG) 2CCPuromycin"
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                  III domain;
purpose;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
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28-FEB-2001; 2001WO-US006414

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RESULT 2064
AAF99708
ID AAF9970
XX
AC AAF997(
XX Immunc
XX
DT 12-JUN
XX
Ummunc
XX
Vaccir
KW Vaccir
KW immunc
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X
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fibronectin scaffold protein array for obtaining a protein/compound which binds to a compound/protein, comprises a fibronectin type III domain having a randomized loop, a randomized beta-sheet or their combination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-FEB-2000; 2000US-00515260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccine; cytostatic; virucidal; bactericidal; fungicidal; immunostimulatory; tumour; viral infection; bacterial infungal infection; parasitic infection; cancer; asthma; infectious disease; allergy; immune deficiency; phosphorot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PHYL-) PHYLOS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
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                                                                                                                                         (IOWA )
                                                                                                                                                                                                                      23-AUG-2000;
                                                                                                                                                                                                                                               25-SEP-1999;
27-SEP-1999;
                                                                                                                                                                                                                                                                                                                         25-SEP-2000; 2000WO-US026383.
                                                                                                                                                                                                                                                                                                                                                                                05-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200122972-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunostimulatory nucleic acid
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                                2001-273485/28.
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                                                                                     Schetter C,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wagner
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                                                                                                                                            PHARM GMBH.
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99US-0156135P.
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88.9%;
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                                                                                       Vollmer J;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      anti-parasitic;
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Vaccinating against tumors, infectious diseases, allergies using immunostimulatory Py-rich and TG nucleic acids. and asthma

Claim 101; Page 56; 338pp; English.

response. The method comprises administering an immunostimulatory nucleic acid to a non-rodent subject in sufficient quantity to stimulate an acid to a non-rodent subject in sufficient quantity to stimulate an acid to a non-rodent subject in sufficient quantity to stimulatory immune response. The present sequence is one such immunostimulatory nucleic acids can be pyrimidine rich nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects (py-rich) articles viral antiqens (e.g. herpesviridae, retroviridae) against tumour antigens, viral antigens (e.g. herpesviridae, retrovirid and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma, haemophilus, campylobacter, clostridium, Escherichia coli and/or staphylococcus), fungal antigens and/or parasitic antigens. The method also useful for preventing cancer, asthma, infectious disease, allergy immune deficiency. The present sequence can also be used to redirect a Th2 to a Th1 immune response and to activate immune cells. Note: the present sequence may have a phosphorothioate backbone The present invention relates to a method for stimulating an immune or or

18 ВP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

밁 á Query Match Best Local S Matches 428 l Similarity 16; Conserv TTTTATTTATTTTTTT Conservative 88.9%; 18 445 0; Score 14.8; Pred. No. 1 Mismatches DB 1; .8e+03; Length Indels 0, Gaps 0

RESULT 2065 AAF99734 AAF99734 standard; DNA; 18

12-JUN-2001 (first entry)

Immunostimulatory nucleic acid #850

infectious disease; allergy; immune deficiency; phosphorothioate; fungal infection; Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic; immunostimulatory; tumour; viral infection; bacterial infection; parasitic infection; cancer; asthma,

Synthetic

WO200122972-A2

05-APR-2001

25-SEP-2000; 2000WO-US026383

25-SEP-1999; 27-SEP-1999; 23-AUG-2000; 99US-0156113P. 99US-0156135P. 2000US-0227436P.

(IOWA) UNIV IOWA RES FOUND. (COLE-) COLEY PHARM GMBH.

Krieg <u>A</u> Schetter C, Vollmer

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WPI; 2001-273485/28.

Vaccinating against tumors, infectious diseases, allergies using immunostimulatory Py-rich and TG nucleic acids. and asthma

Claim 101; Page 56; 338pp; English

The present invention relates to a method for stimulating an immune response. The method comprises administering an immunostimulatory nucleic acid to a non-rodent subject in sufficient quantity to stimulate an

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RESULT 2066
AAF82472
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Best Local S
Matches 16
The present sequence corresponds to polylinker DNA of the phagemid vector pCR2.1. It was used in the construction of a normalised rat CDNA library, which was used in an example demonstrating differential expression of a rat gene referred to as clone P00210D09. The invention relates to a polypeptide comprising a sequence of at least 80% identity to residues 22 -122 of the present sequence, or a sequence encoded by a nucleic acid hybridising under stringent conditions to the complement of the coding region comprising 1031 nucleotides, and having at least one biological activity of the polypeptide encoded by clone P00210D09. The polypeptides and polymucleotides of the invention are useful for the treatment of cardiac, renal and inflammatory diseases. The polymucleotides are useful in assays for identifying lead compounds that may be used as therapeutic agents in the treatment of cardiac, kidney or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma, haemophilus, campylobacter, clostridium, Escherichia coli and/or staphylococcus), fungal antigens and/or parasitic antigens. The method is also useful for preventing cancer, asthma, infectious disease, allergy or immune deficiency. The present sequence can also be used to redirect a Th2 to a Th1 immune response and to activate immune cells. Note: the present sequence may have a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel secreted factor encoded by clone P00210D09 useful for diagnosing treating and/or preventing various cardiac, renal and inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200123419-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nephrotropic;
renal disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Phagemid vector; pCR2.1; rat; secreted factor; P00210D09; cardiant; nephrotropic; antiinflammatory; gene therapy; cardiac disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phagemid vector pCR2.1 polylinker oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 41; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stanton LW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SCIO-) SCIOS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammatory disease; polylinker; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5%;
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Pred. No. 1.
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AAH40502 ID AAH XX

AAH40502 standard;

DNA; 18

RESULT 2068

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AAF16625
ID AAF1
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                                           Query Match
Best Local S
Matches 16
                                                                                                            The present invention provides oligonucleotides, and methods for their use, which are useful in modulating the action of proteins involved in gastric acid production. The target protein is preferably the histamine H2 receptor or one of the proteins which form part of the gastric proton pump. The sequences and methods of the invention are useful in the treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers, duodenal ulcers and other gastric acid disturbances, most of which are caused by Helicobacter pylori
                                                                                                                                                                                                                                          Treating gastric acid disturbance which modulates the activity of a production or secretion.
                                                                                                                                                                                                                                                                                                                                                                                                           30-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA-RNA hybrid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gastric acid disturbance; gastric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gastric acid production inhibiting oligonucleotide SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF16625;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF16625 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inflammatory diseases
                                                                                        Sequence 18
                                                                                                                                                                                                                                                                                         WPI; 2001-025093/03.
                                                                                                                                                                                                                                                                                                                Tachas
                                                                                                                                                                                                                                                                                                                                                             24-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                    24-MAY-2000; 2000WO-AU000498.
                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200071164-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAR-2001
                                                                                                                                                                                                                     Example 3; Page 151; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;
                                                                                                                                                                                                                                                                                                                                       (TACH/) TACHAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             428
                     777 TTTTTAGTAGAGATGGGG 794
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                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 BP; 0
TTTTAGTAGAGACAGGG
                                                                                        BP; 5 A; 1 C; 6 G; 6 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                            Conservative
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                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                              99AU-00000510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                      1.5%;
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18
                                            0
                                                      Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G; 18 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                             Mismatches
                                                                                                                                                                                                                                                       by administering an oligonucleotide polypeptide involved in gastric acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reflux;
                                                                                          0
U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.8e+03
                                                        1.8e+03;
                                                                                          0 Other;
                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gastritis; dyspepsia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18
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                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                             0
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                                             Gaps
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cc primer extension (SNPE) primers, and the sequences of regions flanking concludes kits for determining the presence or absence of regions flanking concludes kits for determining the presence or absence of a SNP, using the coligonucleotides of the invention. The PCR primers are used to amplify a coligonucleotides of the invention are primer is used as a genotyping primer. CC The oligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for determining the presence, absence or cc identity of a SNP and for genotyping nucleic acid sample by clientity of a SNP and for genotyping nucleic acid samples, for e.g. to cassess by association analysis the genotype of an individual or group of cindividuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. cc osteogenesis imperfecta and acute intermittent pophyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial cd disease of which a component is or may be genetic scherois, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and cc paternity analysis. The present sequence represents a PCR primer specific cfor a human SNP containing DNA sequence
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                                S
                                                                      Matches
                                                                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequences AAH37205 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 66; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Picoult-Newburg L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-OCT-2000; 2000WO-US028436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-APR-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNPE; genotyping; agammaglobulinaemia; dia
Lesch-Nyhan syndrome; muscular dystrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single nucleotide polymorphism; SNP; single nucleotide primer extension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ORCH-) ORCHID BIOSCIENCES INC
                                                                                                                                            Sequence 18 BP; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specific lower PCR primer SEQ ID
                                  685
                                                                       16;
_
                                                                                        Similarity
                                   CTCTGCCTCCCGGGTTCA 702
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0160096P.
                                                                                                                                                                              containing
                                                                                                                                            A; 9 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH40944 represent PCR primers,
                                                                                       88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        investigation; paternity analysis;
                                                                                                                                                                                DNA
 18
                                                                      0
                                                                                       Score 14.8;
Pred. No. 1.
                                                                                                                                                                                ведиепсе
                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diabetes insipidus; cancer;
hy; familial hypercholesterolaemia;
                                                                                        1.8e+03
                                                                                                         DB 1;
                                                                       <u>ب</u>
                                                                                                        Length 18;
                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single nucleotide
                                                                      0,
                                                                       Gaps
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RESULT 2069 AAH38362 ID AAH3836

AAH38362 standard; DNA; 18

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0,

RESULT 2070 AAH40562/c

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Crimer extension (SNPE) primers, and the sequences of regions flanking concludes kits for determining the presence or absence of a SNP, using the coligonucleotides of the invention. The PCR primers are used to amplify a CR SNP flanking sequence, the SNPE primer is used as a genotyping primer. The presence or absence of a SNP, using the CR SNP flanking sequence, the SNPE primer is used as a genotyping primer. CR SNP flanking sequence, the SNPE primer is used as a genotyping primer. CR coligonucleotides are useful for genotyping a nucleic acid sample by cased sease of a SNP and for genotyping nucleic acid sample by cased by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being cased by one or more SNPs. Phenotypic traits include diseases e.g. cagammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular cystrophy, familial hypercholesterolaemia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial confiseases, including, rheumatoid arthritis, multiple sclerosis, include microorganism. The method is also useful in forensic investigations and cuternity analysis. The present sequence represents a PCR primer specific for a human SNP containing NNA sequence.
                                                                                                                                  Matches
                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNPE; genotyping;
Lesch-Nyhan syndro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-AUG-2001
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                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 55; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Picoult-Newburg L,
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                                                             836 TGATCTGCCTGCCTCGGC
\vdash
                                                                                                                                  16;
                                                                                                                                                                Similarity
   TGATCTGCCCACCTCGGC
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syndrome; muscular dystrophy; familial hypercholesterolaemia;
                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                                                                                                                          SNP containing DNA sequence
                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lower PCR
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                                                                                                                                                         1.5%;
                                                                                                                                                                                                                                                             8 C; 4 G; 4 T; 0 U; 0 Other;
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                                                                 853
                                                                                                                              ç,
                                                                                                                                                             Score 14.8;
Pred. No. 1
                                                                                                                                     Mismatches
                                                                                                                                                   , o
                                                                                                                                                                1.8e+03;
                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                            Length 18;
                                                                                                                                     Indels
                                                                                                                                     0,
                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                    includes kits for determining the presence or absence of a SNP, using the colligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by performing single-nucleotide primer extension reaction. The oligonucleotides are useful for determining the presence, absence or cligonucleotides are useful for determining the presence, absence or clentity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. capammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular of traits also include symptoms of or susceptibility to multifactorial conteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial consists also include symptoms of or susceptibility to multifactorial confidence of which a component is or may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis,
                                                                           Query Match
Best Local S
Matches 16
                                                                                                                                                                                             microorganism. The method is also useful paternity analysis. The present sequence for a human SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                        Sequence
                                                                                                                                                                                                                             diseases, including, rneumacolu atcoller, maring infection by pathogenic inflammation, cancer, nervous system diseases and infection by pathogenic investigations and microordanism. The method is also useful in forensic investigations and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 67; 83pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Single nucleotide polymorphism; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP specific lower PCR primer
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                                     394
18
                                                                                                Similarity
                                                                                                                                                            18
                                     GCTGGGATTACAGGCGTG
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                                                                                             Pred.
                                                                                                                Score 14.8;
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                                                                                                                                                        4 T; 0 U; 0 Other;
                                                                               Mismatches
                                                                                                No.
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                                                                                                1.8e+03
                                                                                                                DB 1; Length 18;
                                                                                                                                                                                                                    a PCR
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                                                                           0
                                                                           Gaps
                                                                           0,
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RESULT 2071

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249

TCGGCCTCCCAAAGTGCT

266

18

Query Match Best Local Matches 1

Local Similarity

1.5%;

Score 14.8; Pred. No. 1

.8e+03

DB 1;

Length 18;

0

Gaps

0

Conservative

0;

Mismatches

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X5XFXBX&&&&&&X8XEXBXEXEXEXEXEXEFEXXX303030303030303030303030303
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ID AAH
                                                            Consider extension (SNPE) primers, and the sequences of regions flanking concludes kits for determining the presence or absence of a SNP, using the coliquous coliquous that for determining the presence or absence of a SNP, using the coliquous flanking sequence, the invention. The PCR primers are used to amplify a CC The oligonuclectides of the invention. The PCR primers are used to amplify a CC performing a single-nuclectide primer extension reaction. The cC oligonuclectides are useful for determining the presence, absence or cC oligonuclectides are useful for determining the presence, absence or cC oligonuclectides are useful for determining the presence, absence or cC oligonuclectides are useful for determining the presence, absence or cC didn'tity of a SNP and for genotyping nucleic acid samples, for e.g. to casees by association analysis the genotype of an individual or group of casees by association analysis the genotypic traits include diseases, e.g. cC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular cC dystrophy, familial hypercholesterolaemia, polycystic kidney disease, cc osteogenesis imperfecta and acute intermittent porphyria. Phenotypic craits also include symptoms of or susceptibility to multifactorial cC disease of which a component is or may be genetic such as autoimmune cc inflammation, cancer, nervous system diseases and infection by pathogenic confirmation, cancer, nervous system diseases and infection by pathogenic confirmation, cancer, nervous system diseases and infection by pathogenic confirmation, rancer, nervous system diseases and infection by pathogenic confirmation, rancer, nervous system diseases and infection by pathogenic confirmation and confirmation 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 56; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP specific upper PCR primer SEQ ID 1257.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
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                                                    for a human
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  18
BP;
                                                    SNP
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  2 A;
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                                                    containing
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6 C;
  ហ
                                                      DNA
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  ຸດ
  5 T;
                                                    sequence
  0 U;
  0 Other;
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RESULT 2072
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                                                                                                                                       The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide CC AGT02013. This is one of a set of oligonucleotides (see ABA91527-30) used CC to assess the minimum number of ribonucleotides in DNA-RNA chimeric CC oligonucleotides required for RNase H cleavage. Each oligonucleotide of CC the set had a different number of ribonucleotides, 2 in the present case. CC The oligonucleotides were mixed with target DNA oligonucleotide AGT02009 (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30 CC minutes. The results showed that 4 ribonucleotides were the minimum CC number for RNA cleavage. The invention provides probes for nucleic acid Chybridisation. The probes form a hairpin structure comprising a double-stranded stem and a single-stranded loop, and are capable of both CC intramolecular and intermolecular hybridisation. The double-stranded stem CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA CC RNase H cleavage when the probe sensitive to RNase H treatment and CC can be removed. Arrays and methods for nucleic acid hybridisation using C the probes are provided
                                                        Matches
                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               probes for detecting target nucleotide sequence in sample, has sequence that forms hairpin structure having a double-stranded segment and singlestranded loop collectively forming region complementary to target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-JUL-2000; 2000US-00616761
30-MAR-2001; 2001US-00823647
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA-RNA-DNA oligonucleotide AGT02013 used to test RNase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-171819/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dattagupta N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-JUL-2001; 2001WO-US022166
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                                                                                                                 Sequence 18 BP; 2
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                            668
                                                        16;
_
                            TATTTTTAATTTTTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                     Page 49; 72pp;
                                                      Conservative
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/label= RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                 A; 0 C; 0
                                                                     1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                          916
18
                                                      0,
                                                                                                                  G; 16 T; 0 U;
                                                        Score 14.8; D
Pred. No. 1.8e
0; Mismatches
                                                                      1.8e+03
                                                                                      DB 1;
                                                                                                                  0 Other;
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AAD38323/c ID AAD38: RESULT 2073

AAD38323 standard; DNA; 18

ВP

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Human; secretory leukoprotease inhibitor; SLPI; cystatin A; CSTA; SCCE; stratum corneum chymotryptic enzyme; stratum corneum tryptic enzyme; PCR; adhesion protein; protease; protease inhibitor; eczema; primar; SCTE;

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CC The present invention relates to a method for analysing microsatellite CC loci. The method involves coamplifying a set of 3 microsatellite loci, CC comprising a specific mononucleotide repeat locus selected from the group CC consisting of BAT-25, BAT-26, BAT-40, MONO-11 and MONO-15 and two CC tetranucleotide repeat loci selected from FGA, DIS518, DI7S1299 etc from CC asample of genomic DNA and determining the size of the amplified CC fragments. The method is useful for analysing microsatellite loci and for CC detecting microsatellite instability (MSI) in genomic DNA. The CC instability in the set of microsatellite loci are used in prognostic CC tumour diagnosis for the diagnosis of familial tumour predisposition. It CC is also used to detect cancerous tumours in the gastrointestinal system CC and of the endometrium. The cancerous tumours are preferably from a CC colorectal cancer. The present DNA sequence is a PCR primer which is used CC for amplifying human MONO-15 locus. This primer is used in the
                                                                                                                                                                                                RESULT 2074
ABK86369
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Analyzing microsatellite loci for detecting microsatellite instability that can be used for prognostic tumor diagnosis, comprises coamplifying mononucleotide repeat locus and two tetranucleotide repeat loci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-SEP-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-APR-2001; 2001US-00841366.
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Secretory leukoprotease inhibitor (SLPI) PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 17; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-443805/47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-SEP-2000; 2000US-00663020
                                                           07-OCT-2002
                                                                                                                   ABK86369
                                                                                                                                                                         ABK86369
                                                                                                                                                                                                                                                                                                                                                                            674 CTCACTGCAACCTCTGCC 691
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                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                     16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                       CTCACTGCAAGCTCCGCC 1
                                                                                                                                                                            standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 3 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.5%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nassif N;
                                                                                                                                                                               8P
                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1
Pred. No. 1.8e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
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IID AASS
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     susceptibility to a disease associated with abnormal cell-cell adhesion between epithelial cells, comprising detecting a mutation in a nucleic acid encoding an adhesion protein, a protease or a protease inhibitor, or modulated level of adhesion protein, protease or protease inhibitor, or its fragment polypeptide. The method is useful for diagnosing a disease such as eczema, contact dermatitis, lung atopic asthma, post viral athma, bronchial hyper-reactivity, chronic obstructive pulmonary disease, Crohn's disease, ulcerative colitis, coeliac disease, peptic ulceration, impetigo, viral warts, meningitis, skin melanoma, squamous cell carcinoma, basal cell carcinoma, cutaneous lymphoma, skin cancer, malignancy of the gastrointestinal tract, malignancy of the lung,
Rat; secreted factor polypeptide; cardiac disease; renal disease; kid-
inflammatory disease; congestive heart failure; myocarditis; asthma;
dilated congestive cardiomyopathy; angina pectoris; cardiac arrhythmi.
myocardial infarction; pulmonary hypertension; arteriosclerosis; stro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diagnosing a disease or susceptibility to a disease associated with abnormal cell-cell adhesion between epithelial cells, by detecting mutation in nucleic acid encoding adhesion protein, protease or protections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-2000; 2000GB-00029225.
07-DEC-2000; 2000GB-00029879.
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                                                                                                                                                                                                                                                                                                                                                         AAS94743 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18
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                                                                                                                                                                                                                                12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR SKINCARE LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                         2075
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B3; Page 120; 257pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acne vulgaris and psoriasis vulgaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 4 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                             DNA oligonucleotide probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.5%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to a method for diagnosis of a disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  всоре
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.8; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ß
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 18;
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RESULT 2076
ABS78455
ID ABS7845
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XC ABS7845
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AC ABS7845
AC ABS7845
AC ABS7845
AC ABS7845
AC ABS7845
XX Angioge

Angiogenesis

(first

entry)

ABS78455 standard;

DNA;

tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoma; retrolental fibroplasia; rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;

Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;

arthritis; psoriasis;

joint

inhibitory oligonucleotide #939

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428

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Matches
                                              Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal infarction; hereditary nephritis; polycystic kidney disease; chronic renal failure; renal vein thrombosis; medullary sponge kidney; rheumatoid arthritis; osteoarthritis; psoriasis; restenosis; PCR primer; graft versus host reaction; Crohn's disease; ulcerative colitis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alzheimer's disease; gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 51; 189pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel secreted factor polypeptide useful for treating cardiac diseas such as arteriosclerosis, myocardial infarction, inflammatory diseas such as asthma, stroke, and rheumatoid arthritis and renal diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-010779/01.
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                                                                                                                                                                                                                                                                                                     probes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SCIO-)
                                                                                                                                                                                                                                                                                                                                        secreted factor polypeptides of the invention,
     16;
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                                                                                                                                                                                                                                                                                                     PCR primers
                                                                                                                                                                                                   B₽;
     Conservative
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2001US-00809545.
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                                                   Score 14.8;
Pred. No. 1.
          Mismatches
                                                                                                                                                                                                        T; 0 U; 0 Other;
                                                   .8e+03
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                                                                                                      1:
                                                                                                      Length
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RESULT 2077
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma and hypertrophic scars. The present sequence is an antiangiogenic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to inhibiting angiogenesis in a subject, comprising administering at least one antiangiogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antiangiogenic nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is useful for inhibiting angiogenesis associated with solid timour growth,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Inhibiting angiogenesis in a subject, antiangiogenic nucleic acid molecule
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          angiofibroma;
scleroderma; h
                                                                     rubeosis; Osler-Webber Syndrome; myocardial angiogenesis; plaque neovascularisation; telangiectasia; haemophiliac jangiofibroma; wound granulation; intestinal adhesion; ath scleroderma; hypertrophic scar.
                                                                                                                              tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-566690/60
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                                                                                                                                                                            Angiogenesis
                                                                                                                                                                                                                                          13-DEC-2002
                                                                                                                                                                                                                                                                                                     ABS78429 standard;
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                                                                                                                                                                                                           Angiogenesis
                                                                                                                                                                                                                                                                         ABS78429;
               WO200253141-A2
                                            Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                            inhibitor; ss; angiogenesis; solid tumour growth
                                                                                                                                                                                                           inhibitory oligonucleotide #913.
                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36; 276pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              iogenesis in a subject, involves administering nucleic acid molecule to the subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 0 C; 0
                                                                                                                                                                                                                                                                                                     DNA; 18
                                                                                                                                                                precancerous lesion; rheumatoid arthritis; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5%;
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Pred. No. 1.8e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                          atherosclerosis;
                                                                                                        joint;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to inhibiting angiogenesis in a subject, comprising administering at least one antiangiogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antiangiogenic nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is useful for inhibiting angiogenesis associated with solid tumour growth, tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolential fibroplasia, which is the production of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inhibiting angiogenesis in a subject, antiangiogenic nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound gramulation, intestinal adhesions, atherosclerosis, scleroderma hypertrophic scars. The present sequence is an antiangiogenic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 35; 276pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-566690/60
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                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                            angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                      Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (COLE-)
(IOWA ) UNIV IOWA RES FOUND
                                         22-JUN-2000;
                                                                                     22-JUN-2001;
                                                                                                                                 27-DEC-2001.
                                                                                                                                                                        WO200197843-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABL39401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL39401 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunostimulatory nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US048458
                                         2000US-0213346P
                                                                                     2001WO-US020154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PHARM GROUP INC
                                                                                                                                                                                                                                                                                                                                                                                                 metastasis;
                                                                                                                                                                                                                                                                                    1. .18
                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                           /*tag= a
                                                                                                                                                                                                                      note=
                                                                                                                                                                                                                                           mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5%;
                                                                                                                                                                                                                  "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           445
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                involves administering at least
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö.
                                                                                                                                                                                                                                                                                                                                                                                                   88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        molecule. Also
the antiangiogenic
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RESULT 2079
AAD41497
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer, bone cancer, brain and central nervous system (CNS) cancer, breast cancer, cervical cancer, colon and rectum cancer, connective tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, nor Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin cancer, stomach cancer, testicular cancer, and uterine cancer. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of
Novel polypeptide having cytotoxic activity obtainable from Aplysia, useful for destroying tumors, for identifying novel targets for the development of anti-tumor agents, and as specific ion channel modulators
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer, involving administering to a subject having or at risk of developing cancer immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies. The methods are useful for treating or preventing cancer such as basal cell carcinoma, bladder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Weiner G,
                                                                                                                                                                                                                                                                                                                                                                 Apoptosis; ion channel modulator; hyperproliferative disease; tumour therapy; leukaemia; carcinoma; sarcoma; degenerative disease; melano Alzheimer'e disease; parkinson's disease; arteriosclerosis; heart disease; stroke; vascular disease; nootropic; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD41497 standard; DNA; 18 BP
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                                                                       WPI; 2002-537205/57
                                                                                                                                                                           13-OCT-2000; 2000EP-00122466
                                                                                                                                                                                                             12-OCT-2001; 2001WO-EP011837
                                                                                                                                                                                                                                               18-APR-2002
                                                                                                                                                                                                                                                                             WO200231144-A2
                                                                                                                                                                                                                                                                                                                                                 cerebroprotective; cardiant; cytotoxic protein; cyplasin L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present sequence is an immunostimulatory oligonucleotide exemplification of the invention
                                                                                                                                         (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           surface antigens and antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               428
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer.
                                                                                                       Machuy N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to methods for treating or preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   for amplifying sea hare cyplasin L DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.9%;
                                                                                                       Rudel T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.8;
Pred. No. 1.
                                                                                                       Meyer TF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 18;
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                                                                                                                                                                                                                                                                                                                                                                                                   melanoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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protein, factors for generating or detoxifying reactive oxygen species (ROS) and factors for blocking and/or by-passing of caspases. They are useful for tumour therapy. Cytotoxic proteins of the invention are useful for destroying tumours and/or selectively killing cells in tissues, for identifying novel targets for the development of pharmaceutical agents, preferably anti-tumour agents and as specific ion channel modulators, e.g., blockers or openers for therapy, diagnostic or research. They are useful for the diagnosis and therapy of hyperproliferative diseases, preferably tumours, e.g., leukaemia, carcinoma, sarcoma and melanoma. They are also useful for development of drugs for the treatment of they are also useful for development of drugs for the treatment of disease, where the diseases such as Alzheimer's disease, preferably tumours of the seases such as Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             activity obtainable from sea hare Aplysia. Sequences of the invention useful for the manufacture of cytotoxic agents against apoptosis-resistant cells, where the agents are useful for diagnosis, prevention treatment of disorders associated with dysfunctions of GAP-SH3 binding
arteriosclerosis, heart diseases, stroke and vascular diseases. The present sequence is an oligonucleotide which is used for amplifying sea hare cyplasin L DNA. This sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; Page 37; 87pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention relates to novel polypeptides having cytotoxic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          prevention,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention are
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Matches
                                      Query Match
Best Local
              428
                               16;
μ
                                        Similarity
           TTTTATTTTATTTTTTTT 445
                               Conservative
                                      1.5%;
18
                               0
                                       Score 14.8;
Pred. No. 1.
                                Mismatches
                                        .8e+03;
                                                DB 1; Length 18;
                                 Indels
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                               Gaps
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0

Sequence

18

BP; 0 A; 0 C; 0

G; 18

T; 0 U;

0 Other;

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RESULT 2080
Human chromosome 1p36-35 PCR primer SEQ ID NO:11.
                                                                                    ABL42967;
                                                                                                                               ABL42967 standard;
                                        11-APR-2002 (first entry)
                                                                                                                               DNA; 18
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PCR primer; ss. Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

Homo sapiens.

JP2001321190-A

12-MAR-2001; 2001JP-00068285.

10-MAR-2000; 2000JP-00066716

(RIKA) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG.

WPI; 2002-144136/19.

Arraying genome clones.

Claim 4; Page 5; 528pp; Japanese.

XAXFXBXBXBXBXBXBXBXBXBXBXBXAXXBXAAX The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant

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Query Match
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plates containing t
of the marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified by using the above primer; (g) signals are detected from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL43957 to ABL45327 represent the proportions for human chromosome and arrayed.
                The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primers for human chromosome 1036-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP2001321190-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chromosome 1p36-35 PCR
                                                                                                                                                                                                                                                                                                                                        Arraying
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                                                                                                                                                                                                                                                                                                                                                                                                                          RIKAGAKU KENKYUSHO GENOTEX YG.
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                                                                                                                                                                                                                                                                                                                                          genome clones.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                    34;
                                                                                                                                                                                                                                                                                                  528pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.5%;
    amplified by using the above primer;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2;
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resultant cultures

<u>(</u>

second strand cDNA synthesis through a mechanism of terminal continuation. In the method an RNA molecule is obtained and a first primer is added that comprises a region that hybridises to a complementary region of the molecule before a second primer is added comprising at least one riboguanine at the 3' end of the primer. A first comprisentary nucleic acid molecule is synthesised, the RNA molecule and second primer are removed and a second complementary nucleic acid molecule is synthesised to form a second hybrid with an extension product of the third primer bound to the first complementary molecule. The method of the invention is useful for increasing the efficiency of second strand cDNA synthesis and may be used for linear amplification of genetic signals from histologically stained tissue. The present sequence

This invention relates to a novel method for increasing the

efficiency

of.

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Best Local S
Matches 16
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14-FEB-2001;
18-JUL-2001;
07-NOV-2001;
07-NOV-2001;
09-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 are detected from the amplified products; (h) the clones in the multiwe plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABI42957 to ABI45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABI45323 to ABI45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                  Terminal continuation; poly d(T).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18
                                                                                                                                                           Increasing efficiency of second stran continuation model before performing
                                                                                                                                                                                                                             (BAYU )
(REME-)
                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                Poly d(T)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS53437 standard; DNA; 18 BP
                                                                                                                               Example 7; Page 80; 128pp; English
                                                                                                                                                   transcription.
                                                                                                                                                                                        WPI; 2002-567050/60
                                                                                                                                                                                                          Ginsberg
                                                                                                                                                                                                                                                                                                                          14-FEB-2002; 2002WO-US005713
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                                                                                                                                                                                                          SD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTTGGCTCACTGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP;
                                                                                                                                                                                                                                                       ; 2001US-0268645P.
; 2001US-0268664P.
; 2001US-0306216P.
; 2001US-0344557P.
; 2001US-0348242P.
; 2001US-0350176P.
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                                                                                                                                                                                                                                                                                                                                                                                                              TC;
                                                                                                                                                                                                                             AL HYGIENE
                                                                                                                                                                                                                                                                                                                                                                                                              ss; second
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.8; D
Pred. No. 1.8e
0; Mismatches
                                                                                                                                                             strand cDNA synthesis using terminal rming further RNA amplification by RN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e 14.8; L-
No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                              strand cDNA synthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 Other
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RESULT 2083
AAD36362/c
ID AAD3636
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Best Local 9
                                                                                                                                                                                                            amplification reaction using primers and determining the size of the amplified DNA fragments obtained. The method is useful for analysing microsatellite loci and for detecting microsatellite instability (MSI) in genomic DNA microsatellite loci of the second genomic DNA, where the MSI results are useful in prognostic tumour diagnosis, in diagnosis of familial tumour predisposition, to detect cancerous tumours of the gastrointestinal system and of the endometrium, where the cancerous tumours are tumours from a colorectal cancer. The method is useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         represents a poly d(T) PCR primer used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analyzing micro-satellite loci for detecting or diagnosing cancer, by co amplifying set of three microsatellite loci from DNA sample in multiplex reaction using primers, and determining size of amplified fragments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human MONO-15 loci amplifying primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD36362 standard; DNA; 18
                                                                                               Sequence 18
                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method of analysing microsatellite loci. The method involves co-amplifying a set of three microsatellite loci comprising at least one mononucleotide repeat locus and at least tetra-nucleotide repeat loci from a sample of genomic DNA in a multiple tetra-nucleotide repeat loci from a sample of genomic DNA in a multiple.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-SEP-2001; 2001WO-US028647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancer; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2002
                                                                                                                                                  sequence
                                                                                                                                                                               types of
                                                                                                                                                                                                detecting or diagnosing diseases associated with MSI such as certain
                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 6; Page 60; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-393975/42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PROM-) PROMEGA, CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-SEP-2000; 2000US-00663020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; microsatellite locus; microsatellite instability; MSI; tumour;
                                                                                                                                             pes of cancer and predisposition for cancer and in diagnostic assays to used to determine treatment and prognosis of disease. The present DNA quence is a primer which is used for amplifying human MONO-15 locus.
                                                                                                                                 primer is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           428 TTTTATTTTATTTTTT 445
 674 CTCACTGCAACCTCTGCC 691
                              1 Similarity
16; Conserv
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                                                                                             B₽;
                                  Conservative
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88.9%;
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                                                                                                 G; 3 T; 0 U; 0 Other;
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                                             Score 14.8; DB 1;
Pred. No. 1.8e+03;
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Pred. No. 1.8e+03
                                                                                                                                                                                                                                                                                                                                             from a sample of genomic DNA in a multiplex
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                                  Mismatches
                                                                DB 1;
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                                                              Length 18;
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ABZ10473/c ID ABZ104

ABZ10473 standard;

DNA; 18

0

ABZ10473;

RESULT 2085

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RESULT 2084
ABA93239
ID ABA9323
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AC ABA9323
XT
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                                                                                                                                                                                                                                            The present invention describes a method for the comparative detection of the amount of an RNA. The method comprises: (a) cDNAs obtained by CC transcribing respectively from at least two tissue RNAs obtained by CC transcribing respectively from at least two tissue RNAs obtained by CC fragmented by using a same restriction enzyme; (b) each different adaptor and a common adaptor are added to each of the cDNA fragments derived from the same or different tissues by the step (a); (c) the resultant adaptor added cDNAs are mixed together; (d) an adaptor primer having the common sequence to said different adaptor and a gene-specific adaptor are used to amplify said adaptor-added cDNAs containing no region derived from CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the cDNA amounts are measured between the tissues; (f) the RNA is detected CC from the measured between the tissues; (f) the RNA is detected CC from the measured result; (g) each different adaptor and a common adaptor added to each of the genomic DNA fragments derived from a same or different individuals; (h) the resultant adaptor-added genomic DNAs are CC different; (i) the adaptor-added genomic DNAs are amplified by using an adaptor primer having the common sequence to the different adaptor and a sequence-specific adaptor; and (j) the ratios of the amplified by using an adaptor cDNAs are measured between the individuals. The method is used for the detection of the amounts of RNA and DNA. The present common common for the present invention in the common to make the common co
                                                                                                                                      Query Match
                                                                                            Matches
                                                                                                                                                                                    Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 9; 9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-MAY-2000; 2000JP-00160324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2000; 2000JP-00160324
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detection; comparative detection; adaptor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Adaptor oligonucleotide SEQ ID
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                                                                                                                                                                                                                                  sequence represents an oligonuc exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UNIT-) UNITECH CO
                                                                                                                  Local Similarity
                                           428
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                                           TTTTATTTTATTTTTTT 445
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                                                                                            Conservative
                                                                                                                                                                                      BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detection of the amounts
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                                                                                                                  1.5%;
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18
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Pred. No. 1.
                                                                                                                                                                                                                                     invention
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                                                                                                                  .8e+03
                                                                                                                                          DB 1;
                                                                                                                                        Length 18;
                                                                                               Indels
                                                                                            <u>,,</u>
                                                                                          Gaps
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16-JAN-2003

(first entry)

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                                                        Matches
                                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                             lymphocytic leukaemia and acute myelogenous leukaemia; as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables highly specific classification of haematopoietic cell proliferative disorders. The present method enables highly specific classification of haematopoietic cell proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                          represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-018942/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-2001; 2001US-0278333P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2002; 2002WO-EP003401.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Haematopoietic cell proliferation disorder related
                                                                                                                Sequence 18 BP; 4 A; 1 C; 7
                                                                                                                                                                                                                                                                                                                                                                    which distinguishes between methylated and non-methylated CpG
dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lewin A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENOMICS
                           1055
18
                                                       16;
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                                                                     Similarity
                          ACCACACCCCGCTAATTT 1072
ACCACACCCGACTAATTT 1
                                                                                                                                             allowing for improved and
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AG.
                                                                     1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Adorjan
                                                       0;
                                                                                                                 G; 6 T; 0 U; 0 Other;
                                                                     Score 14.8;
Pred. No. 1
                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Guetig D, P, Grabs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Model F,
                                                                                                                                             informed treatment
                                                                      .8e+03
                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Howe A, Mueller G, Lesche R, Le Mueller V, Otto
                                                                                  Length 18;
                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mueller J;
he R, Leu E
                                                                                                                                              Ģ,
                                                                                                                                             patients
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                                                        <u>,,</u>
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                                                       Gaps
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RESULT 2086 ABZ10474/c ID ABZ1047 XX

ABZ10474 standard;

DNA;

18

ВP

RESULT 2087 ABV76822/c ID ABV7682

ABV76822

standard; DNA; 18

ВP

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The present invention describes a method for detecting and conditional differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a condition method comprises contacting a target nucleic acid in a conditional sample obtained from the subject with at least 1 reagent, contacting a target nucleic acid in a conditional sample obtained from the subject with at least 1 reagent, contacting a target nucleic acid. ABZ09861 to ABZ11118 conditional subject with at least 1 reagent, contact and non-methylated CPG dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118 converses the specifically claimed nucleotide sequences from the present convention. Oligonucleotides from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative converses of the cytosine methylation state and/or single nucleotide converses and their complements; and as primers for the converse of the sequences and their complements; and as primers for the converse of the nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between converses of the cases diagrams a predisposition to, differentiation between converses of the cases of
                                                                                                                              Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Berlin K, Braun A, Distler J, Olek A, Piepenbrock C, Adorjan Lewin A, Lipscher E, Maier S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent tl distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytosine methylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Haematopoietic
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                                                                                                                                                                                                                                                                   Sequence 18
                                                                                                                                                                                                                                                                                                                                                                    subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables highly specific classification of haematopoietic cell proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-018942/01.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002WO-EP003401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-OCT-2002.
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                                                                1055
18
                                                                                                                                                              Similarity
                                              ACCACACCCCGCTAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lipscher E,
, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                       allowing for improved and informed treatment
                                                                                                                              1.5%;
nilarity 88.9%;
Conservative
                                                                                                                                                                                                                                                                          BP; 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cell proliferation disorder related
                                                                                                                                                                                                                                                                       A; 0
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                                                                                                                                                                                                                                                                          C; 7
                                                                1072
                                                                                                                                     0,
                                                                                                                                                                                                                                                                          G; 7 T; 0
                                                                                                                                                                     Score 14.8;
Pred. No. 1
                                                                                                                                     Mismatches
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1 P, Grabs
Model F,
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                                                                                                                                                                         1.8e+03;
                                                                                                                                                                                                                                                                              0 Other
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Mueller V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Howe A,
                                                                                                                                                                                                      ۲.
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                                                                                                                                                                                                      Length 18;
                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mueller J;
                                                                                                                                                                                                                                                                                                                                                  of patients
                                                                                                                                        0
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                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pelet C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #614
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RESULT 2088
AAD56466/c
ID AAD5646
XX AAD5646
XX Target
XX Target
XX ACYCLIC
XX Unident
XX WO2003(
XX Unident
XX Unident
XX Unident
XX YOUNGEN
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genomic DNAs participating in rheumatoid arthritis, applicable in diagnosis as well as judging onset risks of and screening drugs for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer used to amplify a human cDNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABV76822;
                                                                                                                                                                                                                                                                                                                                                                      Target
                                                                                                                                                                                                                                                                                                                                                                                                                      07-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD56466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD56466 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 7; 25pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shiozawa S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2001; 2001JP-00102006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-2002; 2002WO-JP003191.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200279466-A1
    Damha MJ,
                                                                                            29-OCT-2001; 2001US-0330719P
                                                                                                                                         29-OCT-2002;
                                                                                                                                                                                      08-MAY-2003
                                                                                                                                                                                                                                 WO2003037909-A1
                                                                                                                                                                                                                                                                                 Unidentified
                                                                                                                                                                                                                                                                                                                           Acyclic linker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SHIO/) SHIOZAWA S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-FEB-2003
                                                 (UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The specification describes a genomic DNA sequence which theumatoid arthritis. The DNA is applicable in diagnosis judging onset risks of, and screening drugs for treating theumatoid arthritis. The present PCR primer was used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003-046814/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18
                                                                                                                                                                                                                                                                                                                                                                    RNA #1 used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        based on gene mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTACAGGCGTGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTACAGGCATGCGCCAC
    Viazovkina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3 A; 4 C; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                            2002WO-CA001628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Komai K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                                                                                                                           expression; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      onset risk; PCR; primer;
  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yagi H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
    Mangos MM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G; 5 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď,
    Parniak MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
    Min
    <u>~</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h participates in s as well as g or preventing, n the course of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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Length

18;

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The invention relates to an acyclic linker-containing oligonucleotide comprising at least one modified deoxyribonucleotide. Oligonucleotides of the invention are useful for preventing or decreasing translation, reverse transcription and/or replication of a target RNA in a system. They are useful for selectively preventing gene expression in a sequence-specific manner, for hybridising to complementary RNA such as cellular mRNA or viral RNA, to hybridising to complementary RNA such as cellular RNA. They are also useful therapeutically in formulations or medicaments to prevent or treat a disease characterised by the expression of a particular target RNA. The invention is used in gene therapy. The present
                                                                                                                                                                                                                                                                                                                                                                                            decreasing
target RNA
Sequence 18 BP; 18
                                                                                                                                                                                                                                                                                                                                              Example 2; Fig 5; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-421516/39.
                                           sequence is a target RNA, used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                            acyclic linker-containing oligonucleotide useful for preventing asing translation, reverse transcription and/or replication of a t RNA in a system, comprises a modified deoxyribonucleotide.
A; 0 C; 0 G; 0 T; 0 U; 0 Other;
                                                of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
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RESULT 2089
AAD56440
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                          07-AUG-2003
                                              08-MAY-2003
                                                                                            Unidentified.
29-OCT-2001; 2001US-0330719P.
                       29-OCT-2002; 2002WO-CA001628
                                                                     WO2003037909-A1
                                                                                                                            Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
                                                                                                                                                  Antisense oligo
                                                                                                                                                                                               AAD56440;
                                                                                                                                                                                                                      AAD56440 standard;
                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                   428
                                                                                                                                                                                                                                                                              18
                                                                                                                                                                                                                                                                                                                           16;
                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                     TTTTATTTTATTTTTTT
                                                                                                                                                                                                                                                                              TTTTTTTTTTTTTTT
                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                          (first
                                                                                                                                                  #1, to elicit RNase H degradation of target RNA.
                                                                                                                                                                                                                      DNA;
                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                    1.5%;
                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                    445
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                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                      Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                       .8e+03
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(UYMC-) UNIV MCGILL.

Damha MJ,

Viazovkina

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Mangos

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Parniak

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Min

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The invention relates to an acyclic linker-containing oligonucleotide comprising at least one modified decoxyribonucleotide. Oligonucleotides the invention are useful for periodic or decreasing translation, reverse transcription and/or replication of a target RNA in a system. They are useful for selectively preventing gene expression in a sequence specific manner, for hybridising to complementary RNA such as cellular

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Novel acyclic linker-containing oligonucleotide useful for preventing decreasing translation, reverse transcription and/or replication of a target RNA in a system, comprises a modified deoxyribonucleotide.

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Example 2;

Fig

9; 104pp; English.

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Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA or viral RNA, to hybridise to and induce cleavage of complementary RNA. They are also useful therapeutically in formulations or medicaments to prevent or treat a disease characterised by the expression of a particular target RNA. The invention is used in gene therapy. The present sequence is an antisense oligo used to elicit human RNase (ribonuclease) H degradation of target RNA. This sequence is used in the exemplification
The invention relates to an acyclic linker-containing oligonucleotide comprising at least one modified deoxyribonucleotide. Oligonucleotides of the invention are useful for preventing or decreasing translation, reverse transcription and/or replication of a target RNA in a system. They are useful for selectively preventing gene expression in a sequence-specific manner, for hybridising to complementary RNA such as cellular mRNA or viral RNA, to hybridise to and induce cleavage of complementary RNA. They are also useful therapeutically in formulations or medicaments to prevent or treat a disease characterised by the expression of a particular target RNA. The invention is used in gene therapy. The present sequence is an antisense oligo used to elicit human RNase (ribonuclease) H degradation of target RNA. This sequence is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                             Novel acyclic linker-containing oligonucleotide useful for preventing decreasing translation, reverse transcription and/or replication of a target RNA in a system, comprises a modified deoxyribonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2'F-ANA antisense oligo #1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-AUG-2003
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                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                           WPI; 2003-421516/39
                                                                                                                                                                                                                                                                                                                                                                                                    29-OCT-2001; 2001US-0330719P
                                                                                                                                                                                                                                                                                                                                                                                                                                    29-OCT-2002; 2002WO-CA001628
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Acyclic linker;
                                                                                                                                                                                                                                                                                                                                                                        (UYMC-) UNIV MCGILL
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                                                                                                                                                                                                                                                                                                                                         <u>X</u>
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                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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                                                                                                                                                                                                                                                                                                                                         Viazovkina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 0 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                    7; 104pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           _base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression; gene therapy;
                                                                                                                                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "2'-deoxy-2'-fluoroarabinothymidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                         Mangos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to elicit RNase H degradation of target RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 18 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.8; Di
Pred. No. 1.8e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                           Parniak MA,
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RESULT 2092 AAD57871 ID AAD5787

AAD57871 standard; DNA; 18

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Matches 16
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Matches :
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                                                                                                   The invention describes a method of treating non-allergic inflammatory disease comprising administering to a subject having or at risk of developing a non-allergic inflammatory disease an immunostimulatory nucleic acid for prevention or treatment of the disease. The method is useful for treating non-allergic inflammatory diseases, such as psoriasis, eczema, allergic contact dermatitis, latex dermatitis or inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease. This sequence represents an immunostimulatory nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunostimulatory; antiinflammatory; dermatological; antipsoriatic; antiulcer; gene therap; vaccine; non-allergic inflammatory disease psoriasis; eczema; allergic contact dermatitis; latex dermatitis; inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss
                                                                                                                                                                                                                                     Treating non-allergic inflammatory diseases, sallergic contact dermatitis, latex dermatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACH03247 standard; DNA; 18
                                                                                                                                                                                                                            disease
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                                                                                                                                                                                                                                                                                             Krieg AM,
                                                                                                                                                                                                                                                                                                                                                 29-MAR-2001; 2001US-0279642P
                                                                                                                                                                                                                                                                                                                                                                     29-MAR-2002; 2002US-00112653
                                                                                                                                                                                                                                                                                                                                                                                            13-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                US2003050268-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACH03247;
                                                                                  Sequence 18
                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                 (KRIE/)
(BERG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428 TITTATTTTATTTTTT 445
                     428
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                                           16;
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BERG D J.
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                                                  Similarity
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                                                                                                                                                                                                       Page 33;
                                                                                  B₽;
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                  0 A;
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Pred. No. 1.8e
0; Mismatches
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                                                                                   <u>.</u>
                                                                                                                                                                                                                               immunostimulatory
  18
                     445
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                                                    Score 14.8; DB 1;
Pred. No. 1.8e+03;
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                                         Mismatches
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                                                                                   T; 0 U;
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                                                               DB 1;
                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Other;
                                                                                                                                                                                                                                        such as psoriasis, ecz
s or inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲.
                                           2;
                                                                                                                                                                                                                             nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease;
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                                           0.
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                                                                                                                                                                                          RESULT 2093
AAD57878
                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a new oligonucleoside which comprises at alternating first and second segments. The first segment comprises at least one sugar modified nucleoside. The second segment comprises at least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of each of the first and second segments, so that it comprises at least 2 of alternating segments. The oligonucleotide is useful for preparing a composition for inducing RNase H-mediated cleavage of a target RNA in a system, preventing or decreasing translation, transcription or replication of a target RNA in a system, detecting the presence of a target RNA in a system, validating a gene target corresponding to a target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS) or hepatitis B. The invention is useful in gene therapy. The present
                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 16
Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sugar-modified nucleoside;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligo #1 used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD57871;
                                        Sugar-modified nucleoside; acquired immune deficiency syndrome; hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RU
                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligonucleotide, useful for preventing or treating a disease related to a target RNA in a system, e.g., AIDS or hepatitis B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-689523/65
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-2002; 2002US-0352873P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-JAN-2003; 2003WO-CA000129
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                                                                                                                                             AAD57878;
                                                                                                                                                                        AAD57878 standard;
                                                                                                                                                                                                                                                                                                                                                                                              the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 35; 73pp; English.
                                                                                 Antisense DNA-RNA hybrid #2 used in the exemplification of the invention
                                                                                                                20-NOV-2003
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                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy;
                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acquired immune deficiency syndrome; AIDS; virucide; anti-HIV; antisense; ss.
                                                                                                                                                                         ВP
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                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                     Score 14.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                  Length 18
                                                                                                                                                                                                                                                                                                         Indels
                                        drome; AIDS;
DNA-RNA hybrid,
                                                                                                                                                                                                                                                                                                       0
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Best Local Similarity
7; Conserve
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                                                                                                                      RESULT 2094
AAD57879
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_RNA
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                                                                                                                                                                                                                                                                       Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligonucleotide, useful for preventing to a target RNA in a system, e.g., AIDS or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Damha MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-FEB-2002; 2002US-0352873P
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                                                           20-NOV-2003
                                                                                                                                                                                                                                                                                               the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 35; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-689523/65
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                                                                                    AAD57879;
                                                                                                           AAD57879 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYMC-) UNIV MCGILL
                                                                                                                                                                                               428
                                                                                                                                                                                              TTTTATTTTATTTTTTT 445
                                                                                                                                                                        UUUTTTUUUTTTUUUTTT 18
                                                                                                                                                                                                                       Conservative
                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           label= RNA
'note= "2'-O-methyl-D-uridine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      label=
                                                                                                           DNA; 18
                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "2'-O-methyl-D-uridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "2'-O-methyl-D-uridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
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                                                                                                                                                                                                                      9.
                                                                                                                                                                                                                                  Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or treating hepatitis B.
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                                                                                                                                                                                                                                             Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a disease related
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Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS; hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;

Antisense DNA-RNA hybrid #3 used in

the exemplification of the invention

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RESULT 2095
AAD57877
ID AAD5787
XX AAD5787
AC AAD5787
XZ 20-NOV-
XZ 20-NOV-
XX Antiser
XX Sugar-n
KW hepatit
KW ss.
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                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                least one sugar modified nucleoside. The second segment comprises at least one 2 deoxynucleoside. The oligonucleoside comprises at least 2 each of the first and second segments, so that it comprises at least 4 alternating segments. The oligonucleotide is useful for preparing a composition for inducing RNase H-mediated cleavage of a target RNA in a system, preventing or decreasing translation, transcription or replication of a target RNA in a system, detecting the presence of a target RNA in a system, validating a gene target corresponding to a target RNA in a system or preventing a gene target corresponding to a target RNA in a system or preventing a manual deficiency syndrome (AIDS or hepatitis B. The invention is useful in gene therapy. The present sequence is an antisense DNA-RNA hybrid used in the exemplification of
Sugar-modified nucleoside; acquired immune deficiency synchepatitis B; gene therapy; virucide; anti-HIV; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a new oligonucleoside which comprises at alternating first and second segments. The first segment comprises at least one sugar modified nucleoside. The second segment comprises at
                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 35; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                  New oligonucleotide,
to a target RNA in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-689523/65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Damha MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-2002; 2002US-0352873P
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                                                                                                                                                                                                                                          sequence is an the invention
                                                                                                                                                                                                                        Sequence 18 BP; 0
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                                     Antisense DNA-RNA hybrid #1 used in the exemplification of the invention.
                                                        20-NOV-2003
                                                                                             AAD57877 standard; DNA; 18
                                                                                                                                                                                            Local
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                                                                                                                                                                                Similarity 5; Conserv
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/label= RNA
/note= "2'-O-methyl-D-uridine"
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                                                                                                                                                                                           1.5%;
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"2'-O-methyl-D-uridine"
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                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                   or treating hepatitis B.
                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                  Indels
                   syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                            a disease related
           DNA-RNA hybrid;
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alternating segments. The oligonucleotide is useful for preparing a composition for inducing RNase H-mediated cleavage of a target RNA in system, preventing or decreasing translation, transcription or replication of a target RNA in a system, validating a gene target that in a system, validating a gene target corresponding to a target RNA in a system or preventing or treating a disease related to target RNA in a system or preventing or treating a disease related to target RNA in a system, e.g., acquired immune deficiency syndrome (AID) or hepatitis B. The invention is useful in gene therapy. The present
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                                                                                                                                            The present invention relates to a new oligonucleoside which comprises at alternating first and second segments. The first segment comprises at least one sugar modified nucleoside. The second segment comprises at least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 each of the first and second segments, so that it comprises at least 4 alternating segments. The oligonucleotide is useful for preparing a alternating segments.
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                                                                                                                                                                                                                                                                                                                               New oligonucleotide, useful for preventing or treating a disease related to a target RNA in a system, e.g., AIDS or hepatitis B.
                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
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                                                                                                                                                                                                                                                                                          73pp; English
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"2'-O-methyl-D-uridine"
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"2'-O-methyl-D-uridine"
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= RNA
"2'-O-methyl-D-uridine"
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= RNA
"2'-O-methyl-D-uridine"
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"2'-O-methyl-D-uridine"
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                                                                                                                            The present invention relates to a new oligonucleoside which comprises at alternating first and second segments. The first segment comprises at least one sugar modified nucleoside. The second segment comprises at least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of each of the first and second segments, so that it comprises at least 4 calternating segments. The oligonucleotide is useful for preparing a composition for inducing RNase H-mediated cleavage of a target RNA in a system, preventing or decreasing translation, transcription or replication of a target RNA in a system, validating a gene target corresponding to a target RNA in a system, validating a gene target corresponding to a target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS) or hepatitis B. The invention is useful in gene therapy. The present sequence is a target RNA used in RNAse H assay. This sequence is used in the exemplification of the invention
                                                   Query Match
Best Local S
Matches 16
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Best Local S
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence is an antisense DNA-RNA hybrid used in the exemplification the invention % \left( \mathbf{r}\right) =\mathbf{r}^{\prime }
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                                                                                                      Sequence 18
                                                                                                                                                                                                                                                                                                                                                                          New oligonucleotide, useful for preventing or treating to a target RNA in a system, e.g., AIDS or hepatitis B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sugar-modified nucleoside;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Target RNA #1 used in RNase H assay.
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                                                                                                                                                                                                                                                                                                                                               Example 4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hepatitis B;
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                                                                                                                                                                                                                                                                                                                                              Page 38; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Parniak MA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 0
                                                                                                       ВP;
                                                                                                                                                                                                                                                                                                                                                                        RNA in a system, e.g.,
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Pred. No. 1
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                                                                                                       G; 0 T; 0 U;
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RESULT 2097
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                  in any complete or partial genetic map of the human genome. GH-
polypeptides are useful as antagonists of GH-1 hormone action.
Polypucleotides encoding these polypeptides are useful in gene
The present sequence is a PCR primer used for amplifying human
                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to growth hormone 1 (GH-1) gene including single nucleotide polymorphisms (SNP). The GH-1 diagnostic polynucleotide is useful as markers for the analysis of a disease, of susceptibility to drug treatment for GH-1 dysfunction or other diseases, or may be included
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New growth hormone 1 (GH-1) diagnostic polynucleotide, useful as markers for the analysis of a disease, or of susceptibility to drug treatment for GH-1 dysfunction or other diseases.
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                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 4 A; 9 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 30; 74pp;
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                      Synthetic
                                                          ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
                                                                                                            04-DEC-2003
                                                                                                                                     ADB37210;
                                                                                                                                                             ADB37210 standard;
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                                             hypo-responsive
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                                                                                   Immunostimulatory nucleic acid
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                                                                                                                                                                                                                                                                            16;
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                                                                                                                                                                                                                           TGCCACCACGCCCAGCTA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wagner S,
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                                                                                                                                                                                                                                                                             Conservative
                                                                                                           (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amplifying
                                                subject; immunostimulatory.
                                                                                                                                                              DNA;
                                                                                                            entry)
                                                                                                                                                                                                                                                                                      1.5%;
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                                                                                                                                                                                                                                                                                       Score 14.8;
Pred. No. 1
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US2003087848-A1.

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RESULT 2099
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(PETE/)
(FOUR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic action an aerosol formulation. The method compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represent an immunostimulatory nucleic acid of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-657977/62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypo-responsive
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) PETERSEN D |
FOURON Y.
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                                                                                                                                                                                                   BRATZLER R L.
PETERSEN D M.
FOURON Y.
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                                             and/or preventing allergy or acid alone or in combination
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                                             or asthma using an immunostimulatory on with an asthma/allergy medicament.
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Disclosure; Page 18;

221pp; English

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RESULT 2100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'the invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic acid in an aerosol formulation. The methods and compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represents an immunostimulatory nucleic acid of the invention.
       The invention relates to a method of inhibiting corneal allograft rejection, by contacting the allograft with a topical formulation comprising an antisense oligonucleotide targeted to intercellular adhesion molecule-1 (ICLM-1), extracellular adhesion molecule-1 (ICLM-1) or vascular cell adhesion molecule-1 (VCM-1). The oligonucleotide is useful for inhibiting corneal allograft rejection or for preserving a corneal explant ex vivo, where the explant is human. This sequence corresponds to one of the oligonucleotide of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ss; primer; immunosuppressive; antisense therapy; corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1; extracellular adhesion molecule-1; ELAM-1; vascular cell adhesion molecule-1; VCAM-1; corneal explant.
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                                                                                                                                                             molecule-1, molecule-1.
                                                                                                                                                                        Inhibiting corneal allograft rejection, by contacting an allograft with formulation having an oligonucleotide targeted to intercellular adhesion molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion
                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                             16-OCT-2002; 2002WO-US033236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human ICAM-1
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                                                                                                                                   Example
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/note= "internucleotide linkages
phosphodiester bonds"
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No. 1.8e+03;
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Best Local
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                                                                                                                                                                                                             The invention relates to a method of analysing microsatellite loci. Invention is used to detect microsatellite instability in prognostic tumour diagnosis, particularly a familial tumour predisposition, especially to detect cancerous tumours of the gastrointestinal system endometrium, most particularly colorectal cancer. The present sequence
  ADE14006
                                                                                                                                                                                                                                                                                                                   Analyzing microsatellite instability by amplification of multiple loci including mono-nucleotide and tetra-nucleotide repeats useful to detect cancerous gastrointestinal or endometrium tumors particularly colorectal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; PCR; primer; human; microsatellite locus;
prognostic tumour diagnosis; familial tumour predisposition;
cancerous tumour; gastrointestinal cancer; endometrial cancer;
                       ADE14006 standard; DNA; 18
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24-APR-2001; 2001US-00841366.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human microsatellite locus PCR primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADD31139 standard;
                                                                                                                                                                                                  represents a human microsatellite locus PCR primer.
                                                                                                                                                                                                                                                                                     Claim 4;
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                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 U; 0 Other;
                                                                                                                                        1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .8e+03;
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                                                                                                                                                   Length 18;
                                                                                                                                                                                                               The present sequence
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                                                                                                                                                                                                                           system or
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Best Local (
                                                                         Matches
                                                                                                                                                                                                                                          susceptibility to glaucoma or to a progressive ocular hypertensive disorder resulting in loss of visual field in a patient (or the severity or progression of glaucoma in a patient, comprising providing amplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and detecting the polymorphism). The invention is used to diagnose and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               least 20 but not more than 1500 consecutive nucleotides of the optineux promoter appearing as ADE13890. Also included are the optineuxin promote operably linked to a heterologous nucleic acid, a nucleic acid capable detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a heterologous nucleic repeated to a host cell comprising the promoter operably linked to a heterologous promoter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          glaucoma
                                                                                                                                                                                                 prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter marif
                                                                                                                                                                                                                                                                                                                                                                                                                    heterologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism in a promoter region of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing DNA, determining the presence or increased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; optineurin;
SNP; glaucoma; prog
                                                                                                                                                 Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11; SEQ ID NO 117; 159pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Raymond V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SIEE/)
(RAYM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAR-2002; 2002US-00091281.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention
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                                   668 TCTTGGCTCACTGCAACC 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vention relates to an isolated nucleic acid (N1) comprising 20 but not more than 1500 consecutive nucleotides of the opt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SI E.
RAYMOND
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                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ptineurin; ds; ophthalmological; single nucleotide polymorphism;
ucoma; progressive ocular hypertensive disorder;
related disorder; motif; repeat element; regulatory region.
                                                                                                                                                                                         regulatory
TCTTGGCTCAGCGCAACC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      promoter motif,
                                                                                                                                                 BP; 3 A; 7 C; 4 G; 4 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morissette
                                                                         Conservative
                                                                                                                                                                                         region.
                                                                                           1.5%;
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                                                                         0;
                                                                                           Score 14.8;
Pred. No. 1
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                                                                           Mismatches
                                                                                           .8e+03
                                                                                                                                                     0 Other;
                                                                                                               DB 1;
                                                                                                             Length 18;
                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               f the optineurin ineurin promoter acid capable of
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                                                                           Gaps
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ADE14244 ID ADE1

ADE14244 standard; DNA; 18

ВP

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RESULT 2103

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                                                                                              Matches
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Best Local (
                                                                                                                                                                                                                                                    or progression of glaucoma in a patient, comprising providing amplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-864168/80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Raymond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SIEE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAR-2002; 2002US-00091281
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                                                                                                                                                                                     Sequence
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RAYMOND V.
                                                                                                                  Similarity
                                                                                                                                                                                        18
    TTCACCATATTGGCCAGG
                                          TTCACCATGTTCGCCAGG 812
                                                                                                                                                                                                                                     regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morissette
                                                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                              Conservative
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                                                                                                                  1.5%;
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                                                                                                                                                                                     C; 4
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    18
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                                                                                              Score 14.8; DB 1
Pred. No. 1.8e+03
0; Mismatches
                                                                                                                                                                                        5 T;
                                                                                                                                                                                        0 U;
                                                                                                                                                                                        0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or regulatory region
                                                                                                                                              DB 1;
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                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphism;
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                                                                                                 Gaps
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RESULT 2104

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TCTCÁCCCAAGCTGGAGT TGTCACCCAGGCTGGAGT

638 18

> 655 0

Query Match Best Local (Matches

Similarity

1.5%; 4 C; 6

Score 14.8; DB 1; Pred. No. 1.8e+03;

Length 18 Indels

Mismatches

2;

0;

Gaps

0

18

BP; 4

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G; 4 T; 0

U; 0 Other

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Crite invention relates to an isolated nucleic acid (N1) comprising at CC least 20 but not more than 1500 consecutive nucleotides of the optineurin CC promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin cCC promoter, a host cell comprising the promoter operably linked to a CC heterologous sequence, diagnosing or prognosing glaucoma in a sample cCC obtained from a cell or bodily fluid (comprising detecting a polymorphism (SNP) in the optineurin gCC phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing DNA, determining the presence or increased cCC disorder resulting in loss of visual field in a patient (or the severity or progression of glaucoma in a patient, comprising providing containing containing the variation within the optineurin cCC obtaining a sample containing the variation within the optineurin containing a sample containing the variation within the optineurin containing a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and cc capable of detecting a SNP located within an optineurin promoter, and cc capable of detecting a snp located within an optineurin promoter, and cc capable of detecting a snp located within an optineurin promoter, and cc capable of detecting a snp located within an optineurin promoter. The present sequence is an optineurin promoter motif, repeat element or contains of the containing promoter motif, repeat element or contains of the containing promoter motif, repeat element or contains of the containing promoter motif, repeat element or contains of the containing promoter motif, repeat element or containing promoter motif, repeat element or containing containing promoter motif, repeat element or containing containing promoter motif, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE14203;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Raymond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-864168/80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SIEE/)
(RAYM/)
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RAYMOND V.
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                                               regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 314; 159pp; English
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                                               region
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RESULT 2105
ADE77617/c
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                                                                                                                                                               This invention relates to a novel method for the concurrent interrogation of a number of polymorphic sites in the presence of, and without contretened from, non-designated polymorphic sites. Specifically, it comprises conducting a multiplexed elongation assay by applying one or concording a multiplexed elongation assay by applying one or combination of annealing and elongation steps under temperature controlled conditions. Furthermore, this detection method uses probe controlled conditions. Furthermore, this detection, a superior controlled conditions environmentally multiplexed elongation and relies on enzymatic recognition, a superior controlled conditions and relies on enzymatic recognition, a superior contechnique that no longer depends on differential hybridisation. The green indentify mutations within the cystic fibrosis conductance conductance resultator (CFR) or the human leukocyte antigen (HLA) concurrent interrogation of a multiplicity of conformation sites is useful for genetic testing, carrier screening, conjunction is the suseful for genetic testing, carrier screening, conjunction is the negative control probe used for the elongation of the mediated multiplexed analysis of HLA-DR, in an exemplification of the
                                                           Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-OCT-2001; 2001US-0329427P.
15-OCT-2001; 2001US-0329428F.
15-OCT-2001; 2001US-0329619P.
15-OCT-2001; 2001US-0329620P.
14-MAR-2002; 2002US-0364416P.
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                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Concurrent interrogation of a number of polymorphic sites, genetic testing, carrier screening, genetic profiling, and testing, comprises conducting a multiplexed elongation assumptions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      multiplexed elor
cystic fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genetic testing; carrier screening; genotyping; profiling;
multiplexed elongation assay; enzymatic recognition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human probe NEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example
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                             428
18
                                                            16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ss; negative control; CFTR; human leukocyte antigen; HLA;
                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9;
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                  TTTTATTTTATTTTTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page
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                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for elongation mediated multiplexed analysis of HLA-DR
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                                                                                                                         A; 0 C; 0
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                                                                         1.5%;
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                           445
μ.
                                                           0;
                                                                           Score 14.8; DB 1
Pred. No. 1.8e+03
                                                                                                                         G; 0 T; 0 U; 0 Other;
                                                              Mismatches
                                                                                          1;
                                                                                          Length 18
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and identity assay using
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                                                            Gaps
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1055 ACCACACCCCGCTAATTT 1072

Conservative

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Mismatches

Query Match Best Local Similarity

1.5%;

Score 14.8; Pred. No. 1

.8e+03

DB 1;

Length 18; Indels

<u>,</u>

Gaps

0

Matches

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RESULT 2106
ADE84357/c
ID ADE8435
XX
AC ADE8435
XX
XX
                                                                                        acid. The genes and/or their regulatory regions are preferably selected from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GPIb beta, MYOD1, CDH3, CGSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TDF3, CDKN1E, CDKN1E, CDKN1E, CDKN2B, CDKN2B, CDKN2B, CDKN2B, CDKN2B, CDKN2B, CDKN2B, CDKN2B, CDKN2C, CGGSTP1, HIC-1, MGMT, MAK1, BAX or HOXAS. Oligomers, peptide nucleic acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences of the genes are useful for detecting the methylation state of all the CGC dinucleotides within one or more the sequences, or their complements, cfor determining the cytosine methylation state of all the CCC polymorphisms (SNPs), and for differentiating at least two of the medical conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular clifferentiation between subclasses, diagnosis, prognosis, treating and/or monitoring of lymphoid cell proliferative disorder. This sequence
Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        between lymphoid cell proliferative disorders associated with at least one gene and/or their regulatory regions in a subject by contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between methylated and non-methylated CpG dinucleotides within the target nucleic methylated and non-methylated CpG dinucleotides within the target nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Detecting and differentiating between lymphoid cell proliferative disorders comprises contacting a target nucleic acid with at least one reagent that distinguishes between methylated and non-methylated CpG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diffuse large B-cell lymphoma; mantle cell lymphoma;
chronic lymphocytic leukemia; small lymphocytic lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lymphoid cell proliferative disorder; methylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human lymphoid cell proliferative disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 30; SEQ ID NO 353; 448pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-NOV-2001; 2001DE-01057491.
28-DEC-2001; 2001DE-01064501.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a method of detecting and differentiating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-457621/43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003044226-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            methylated CpG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG
                                                                      mentioned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Caldwell C,
BP; 4 A; 1 C; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first
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                                                                  genes.
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G; 6 T;
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   0 U;
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       0 Other;
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ADE84358/c
ID ADE84
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chronic
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                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                             methylated CpG
                                                                                                                                                                                                                                                                            Human lymphoid cell proliferative disorder gene CpG analysis oligo
                                                                                                                                                                                                                                                                                      29-JAN-2004
                                                                                                                                                                                                                                                                  lymphoid
                                                                                                                                                                                                                                                   ted CpG dinucleotide; single nucleotide polymorphism;
large B-cell lymphoma; mantle cell lymphoma;
lymphocytic leukemia; small lymphocytic lymphoma;
                                                                                                                                                                                                                                                                   cell
                                                                                                                                                                                                                                                                                                         standard; DNA;
                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                   proliferative disorder; methylation;
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SNP

#64.

25-NOV-2002; 2002WO-EP013265 30-MAY-2003 WO2003044226-A2 2001DE-01057491. 2001DE-01064501.

(EPIG-) EPIGENOMICS ÄG.

23-NOV-2001; 28-DEC-2001;

Caldwell C, Genc В, Becker 'n Maier Ś Nimmrich

WPI; 2003-457621/43

reagent that distinguishes between and differentiating between lymphoid cell proliferative comprises contacting a target nucleic acid with at least one hat distinguishes between methylated and non-methylated CpG

Claim 30; SEQ ID NO 354; 448pp; English

The invention relates to a method of detecting and differentiating CC between lymphoid cell proliferative disorders associated with at least CC one gene and/or their regulatory regions in a subject by contacting a CC target nucleic acid in a biological sample obtained from the subject with CC at least one reagent or series of reagents that distinguish between CC methylated and non-methylated CG dinucleotides within the target nucleic cacid. The genes and/or their regulatory regions are preferably selected CC from MDR1, CSNK2B, BGR4, AR, CDK4, RB2, CDC25A, GPID beta, MYOD1, CDH3, CC GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKN1C, CC GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKN1C, CC GSK3beta, ESR1, ABAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic cacid (PNA)-oligomers and/or isolated nucleic acids based on the sequences of the genes are useful for detecting the methylation state of all the CC diffurcleotides within one or more the sequences, or their complements, conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, change are also useful for detecting of a predisposition to, CC differentiation between subclasses, diagnosis, prognosis, treating and/or about the methylation state and or single nucleotide conditions are also useful for detecting of a predisposition to, consistion to, and care also useful for detecting of predispositions of the medical conditions are also useful for detecting of predispositions of the medical conditions are also useful for detecting of predispositions are treating and/or about the sequence of the medical conditions are also useful for detecting of predispositions are treating and/or about the sequence of the medical conditions are also useful for detecting of predispositions within the construction between subclasses, diagnosis, prognosis, treating and/or about the medical conditions are determined and conditions are determined to analyse of CpG positions within the constructions. mentioned genes.

Sequence 18 BP; 4 A; 0 C; 7 G; 7 T; 0 U; 0 Other;

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Query Match
Best Local Similarity
Matches 16; Conserv
  Conservative
         1.5%;
0;
Score 14.8; DB 1
Pred. No. 1.8e+03
0; Mismatches
                       <u>ب</u>
                    Length
  Indels
  <u>,</u>
  Gaps
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유 성 RESULT 2108 beta-migrating plasminogen activator inhibitor 1; PCR; primer; 88; cardiovascular associated; CA; atherosclerosis; ischaemia; hypertension; restenosis; cardiant; cerebroprotective; antiatherosclerotic; WPI; Homo sapiens hypotensive; human. ADF17789; ADF17789 standard; Stropp 15-JAN-2002; 2002EP-00000253 15-JAN-2002; 2002EP-00000253 16-JUL-2003 EP1327639-A1 PCR primer 12-FEB-2004 (FARB) BAYER AG 18 1055 2003-714408/68 Ġ ACCACACCCAACTAATTT ACCACACCCCCGCTAATTT 1274_C396G_ER for amplifying a human Schwers S, (first entry) DNA; Kallabis ВP ب 1072 Ŧ, Schmitz CA gene

Novel isolated polymucleotide encoded by cardiovascular associated gene, useful for treating cardiovascular disease e.g., high blood pressure, myocardial infarction, stroke, atherosclerosis.

Example; Page 20; 40pp; English.

This invention relates to novel isolated polynucleotides with allelic variations that encode cardiovascular associated (CA) polypeptides, which CC are useful for the identification of therapeutic agents for the treatment CC of cardiovascular disease. Specifically, it refers to methods for CC assessing cardiovascular risks in humans by describing genetic variations CC that diagnose a predisposition or susceptibility for cardiovascular CC diseases including atherosclerosis, ischaemia, hypertension and CC restenosis. The present invention describes specific CA genes that can be used as probes for the detection of genetic polymorphisms. Furthermore, CC they can be used for treating cardiovascular disease such as elevated low density lipoprotein (LDL)-cholesterol levels, high blood pressure, CC abnormal electrocardiographic profile, myocardial infarction or strokes. As such, they can be described as having cardiant, cerebroprotective, CC antiatherosclerotic or hypotensive activities. This oligonucleotide sequence is a PCR primer used for amplifying human beta-migrating cardiant, a CA gene of the

Sequence 18 BP; 4 P 4 C; 5 <u>ი</u> 5 T; 0 ä 0 Other;

밁 á Query Match Best Local Matches 871 18 l Similarity TTACAGGCGTGAGCCACC Conservative 1.5%; 888 0; Score 14.8; Pred. No. 1 Mismatches .8e+03 DB 1; Length 18; Indels 0 Gaps

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RESULT 2109

0

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RESULT 2110
ACA88892/c
ID ACA8889
XX
AC ACA8889
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DE Selecti
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Geneti
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Homo si
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Homo si
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                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel nucleic acid molecule comprising a matrilin-3 gene, or its fragment or variant, a sequence of 137870 bp fully defined in the specification, and at least one polymorphism given in the specification. A protein of the invention has osteopathic activity. A polymucleotide of the invention may have a use in gene therapy. The composition and methods of the invention are useful in diagnosing, prognosing or treating osteoarthritis using polymorphisms in the matrilin-3 gene. The present sequence is used in the exemplification
                                       Genetic marker selection; multiplex PCR amplification; prenatal diagnostic testing; foetal sex determination; genetic identification; DNA profiling; DNA fingerprinting; forensic analysis; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid molecule for diagnosing, prognosing or treating osteoarthritis comprises a matrilin-3 gene or its fragment or variant, and at least one polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADG89548 standard; DNA;
                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human matrilin-3
                                                                                                             Selection and
                                                                                                                                                                                              ACA88892 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 123; 190pp; English.
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05-DEC-2002; 2002US-0431538P
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                                                                                                                                                                                                                                                                                                                     l Similarity
16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                     invention.
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ilarity 88.9%;
Conservative
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                                                                                                                                        (first entry)
                                                                                                             amplification of genetic markers PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENETICS EHF
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                                                                                                                                                                                             DNA; 18
                                                                                                                                                                                                                                                                                                                                                                          7 C; 5
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Pred. No. 1.8e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                              Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                  using polymorphisms in in the exemplification
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                                                                                                              related
                                                                                                             primer #3
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RESULT 2111
ADG31947/c
ID ADG3194
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention describes a method of selecting genetic markers as targets for nucleic acid sequence amplification comprising selecting each of the genetic markers according to a heterozygosity index of 0.5 or greater. Selecting and amplification of genetic markers are useful as targets for nucleic acid sequence amplification, for genetic testing or facilitating multiplex PCR amplification from limiting amounts of target nucleic acid. The methods are also useful for improving genetic diagnostic and screening methods, such as prenatal diagnostic testing, foetal sex determination or genetic identification, e.g. DNA profiling or DNA fingerprinting. The nucleic acid sequence amplification is also useful in forensic analysis of degraded, old, ancient and difficult samples that are difficult to amplify and identify. This sequence represents a PCR primer used in the selection and amplification of genetic markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Selecting genetic markers as targets for nucleic acid sequence amplification, useful for improving genetic testing, e.g. fetal determination, comprises selecting each of the genetic markers to a heterozygosity index.
                                                                                                                                                                                                                                                                                                                                      1947/c
ADG31947
31-MAY-2002; 2002JP-00158853.
12-JUL-2002; 2002JP-00204143.
                                                                                                                                                                          DNA/RNA hybrid; ss; genotyping; gene polymorphism; single nucleotide polymorphism; SNP; cytochrome CYP2C19; cytochrome CYP1A1; glutathione-6-transferase; aldehyde dALDH2; PCR; primer; GSTM1; GSTT1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 3 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 36; Page 39; 64pp; English.
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12-OCT-2001;
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                                          30-MAY-2003; 2003WO-JP006804
                                                                                                   WO2003102178-A1
                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                 RNA/DNA hybrid PCR primer used to amplify human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 16; Conserv
                                                                                                                                sapiens
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                                                                                                                                                                                                                                                                                                                                       standard;
                                                                                                                                                                                                                                                                                                                                                                                                              CCCAGGATGGGGTGCAAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matthews PL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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2001AU-00008235.
                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                       DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88.9%;
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                                                                                                                                                                                                                                                 CYP1A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                           dehydrogenase;
                                                                                                                                                                                                                                                 gene
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                                                                                                                                                                                                                                                 SeqID
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RESULT 2112
ADI34489
ID ADI3448
XX ADI3448
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Best Local S
Matches 16
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25-OCT-2002;
19-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention relates to a novel method of typing gene polymorphisms. Specifically, it refers to the identification of the single nucleotide polymorphism 636A in human cytochrome gene CYP2C19, the T6235C SNP in human cytochrome gene CYP2C19, the T6235C SNP in human glutathione-S-transferase gene and the human aldehyde dehydrogenase gene ALDH2. Furthermore, gene polymorphisms in several target nucleic acids may be detected in a single sample by successive amplification of the individual targets. The present invention descries a fast, accurate and highly reproducible method of detecting a base substitution e.g. SNP, insertion of sensitivity to drugs and other substances, as well as other genomic investigations. This oligonucleotide sequence is a PCR primer used to amplify a human CYP1A1 gene, in an exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isothermal chimeric primer initiated nucleic acid amplification of base substitution, deletion or insertion for typing of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-043111/04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TAKI ) TAKARA BIO INC
                                                                         WPI; 2004-035466/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADI34489;
  Amplifying for RNA in a sample, useful for improving RNA polymerase based RNA transcription from a polynucleotide template, comprises eliminating
                                                                                                                                                                                                                                                            30-MAY-2003;
                                                                                                                                                                                                                                                                                                             11-DEC-2003
                                                                                                                                                                                                                                                                                                                                                         WO2003102243-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADI34489 standard;
                                                                                                                                                                      (JANC ) JANSSEN PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 21; 115pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCGGGCTCACACGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
                                                                                                                        Zhu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
larity 88.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002JP-00211813.
2002JP-00310862.
2002JP-00335830.
                                                                                                                                                                                                                     2002US-0384454P
                                                                                                                                                                                                                                                              2003WO-US017103
                                                                                                                                                                                                                                                                                                                                                                                                                                                 amplification; RNA transcription; RNA polymerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enoki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP.
                                                                                                                                                                         Z
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
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Pred. No. 1.8e
O; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ueda
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Okuda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
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RESULT 2113
                                                                                                                               Matches
                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                           to form a transcription sample containing a cDNA template; eliminating single-stranded oligonucleotide from the transcription sample; and transcribing the cDNA template into RNA using an RNA polymerase. The method is useful for improving RNA polymerase based RNA transcription from a polynucleotide template. The method inhibits the undesired non-template derived production of RNA in the transcription reaction. Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
                                                                                                                                                                                                                                                                                                                                                                          sample. The method involves symmetries transcriptase and an incubating the sample RNA with reverse transcriptase and an oligonucleotide primer that primes synthesis in a direction toward 5' of the RNA; converting the single-stranded cDNA into double-stranded of the RNA; converting the single-stranded cDNA template; eliminating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single-stranded oligonucleotide from the transcription sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                eliminating single-stranded oligonucleotide from the transample. The method involves synthesizing single-stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1;
                                                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to amplifying for RNA in a sample comprises eliminating single-stranded oligonucleotide from the transcription
                                                                                                                                                                                                                                            transcription reaction.
                                                                                            428
                                                                                                                             16;
                                                                                                                                                   Similarity
                                                                                           TTTTATTTTATTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID
                                                                                                                                 Conservative
                                                                                                                                                                                                       BP; 0 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8; 26pp; English
                                                                                                                                                 88.9%;
                                                                                                                                                                                                           0
                                                          18
                                                                                            445
                                                                                                                                                                                                         G;
                                                                                                                                 0;
                                                                                                                                                   Score 14.8;
Pred. No. 1
                                                                                                                                                                                                         18 T; 0 U;
                                                                                                                                   Mismatches
                                                                                                                                                   .8e+03;
                                                                                                                                                                      DB 1;
                                                                                                                                                                                                           0 Other;
                                                                                                                                   Indels
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                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                     RNA
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0;

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Unidentified.
                                                                                                       melanin-concentrating hormone receptor 1; MCHR1; anorectic; gene therapy;
                                                                                                                                                   MCHR1 genomic sequence analysis primer #70
                                                                                                                                                                                                                                           ADH76761;
WO2003104489-A2
                                                                                   obesity; primer;
                                                                                                                                                                                                 22-APR-2004
                                                                                                                                                                                                                                                                                       ADH76761 standard;
                                                                                                                                                                                                 (first entry
                                                                                                                                                                                                                                                                                         DNA; 18
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18-DEC-2003

05-JUN-2003; 2003WO-EP005917.

05-JUN-2002; 2002EP-00012569

(UYPH-) UNIV PHILIPPS MARBURG

WPI; 2004-062377/06

Platzer M, Reichwald

Platzer

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Gudermann

'n

Hebebrand

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New diagnostic composition, useful presence of a molecular variant of the disorder. the diagnosing obesity related to MCHR1 gene or a susceptibility susceptibility y to

Example 2; Page 43; 76pp; English

The polynucleotide composition comprises: a sequence encoding a polypeptide with defined sequences given in the specification; a sequence hybridizing to a melanin-concentrating hormone receptor (MCHRI) gene; a polynucleotide encoding an MCHRI polypeptide; or a sequence comprising one or more of the nucleotide exchanges (SNP's) the specification invention relates to a novel diagnostic polynucleotide least 8 bases g an MCHR1 polypeptide; or a nucleotide exchanges (SNP's) composition. a sequence 얁 given f the

밁 S

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RESULT 2114
ADH76763
The invention relates to a novel diagnostic polynucleotide composition.

The polynucleotide composition comprises: a sequence encoding a polypeptide with defined sequences given in the specification; a sequence capable of hybridizing to a melanin-concentrating hormone receptor 1 (MCHR1) gene; a polynucleotide encoding an MCHR1 polypeptide; or a sequence comprising one or more of the nucleotide exchanges (SNP's) given in the specification and at least 8 bases of surrounding sequence of the MCHR1 gene. The composition has anorectic activity. The polynucleotide composition may be used in gene therapy to treat the disorders of the invention. The composition is useful for diagnosing obesity related to the presence of a molecular variant of the MCHR1 gene or a susceptibility to the disorder. The MCHR1 protein or polynucleotide is useful for presenting a medicament for treating or preventing obesity related to the presence of a molecular variant of the MCHR1 gene. This polynucleotide represents an MCHR1 primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local (
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Reichwald K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH76763 standard; DNA; 18 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 43; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New diagnostic composition, useful for presence of a molecular variant of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-062377/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-2002; 2002EP-00012569
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        obesity; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     melanin-concentrating hormone receptor 1; MCHR1; anorectic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MCHR1 genomic sequence analysis primer #72.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYPH-) UNIV PHILIPPS MARBURG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hebebrand J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosing
MCHR1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             obesity related to the or a susceptibility to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hinney A;
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Sequence 18 BP;

2 A;

5 C;

5 G;

6 T; 0 U; 0 Other;

Query Match Best Local Similarity

1.5**%**; 88.9**%**;

Score 14.8; Pred. No. 1

1.8e+03;

DB 1;

Length

Sequence 18

BP; 18

A; 0

c; o

ଜ; 0

T; 0 U; 0 Other

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                                         The invention relates to a method of determining a functional property of a fluid in a chamber comprising introducing into the chamber a support to CC which is bound several test elements, each of the test elements comprising a reaction domain and a detection domain, introducing into the CC comprising a reaction domain and a detection domain, introducing into the CC chamber a fluid that is interactive with the reaction domains, removing CC the fluid from the chamber, determining by means of the detection domains companies, and relating the locations to the functional property of the CC chamber, and relating the locations to the functional property of the CC comprises a member of a specific binding pair. The determining of the CC comprises a member of a specific binding pair. The determining of the CC chosen from the flow pattern of the fluid. The functional property is CC chosen from the flow pattern of the fluid, reagent distribution within CC useful for determining a functional property of a fluid in a chamber and CC for synthesising arrays of biopolymers e.g., arrays of polymucleotides. CC The method is a companied for the characterisation of a new fluid in a known CC combination. This sequence represents a test element used in the method of a feature of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                       Determining a functional property of fluid in chamber by introducing a support comprising test elements having reaction and detection domains, introducing a test fluid, and detecting locations not reactive with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Test element oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH78590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH78590 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                            Example 2; SEQ ID NO 2; 22pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-061269/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (LEPR/)
(AMOR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUN-2002; 2002US-00172675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUN-2002; 2002US-00172675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003232343-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leproust
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1114 GCTGGTCTCAAACTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     functional property; fluid flow pattern; reagent distribution; time dependent fluid reactivity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   reagent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ᆫ
                                   invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AMORESE D A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PECK B J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGTCTTGAACTCCTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peck BJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.8; D
Pred. No. 1.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
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RESULT 2
ADI20814
ID ADI
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                                                                                        The present invention relates to detecting the methylation state of the CC contacting a target nucleic acid having one or more sequences selected CC from 5 3581 base pair sequences in a biological sample with at least one CC methylation state of the 5 and promoter region of the gene DD3 within a cC methylation state of the 5 and promoter region of the gene DD3 within a cC subject. The set of oligonucleotides comprising at least three of the CC oligoners is useful for detecting the cytosine methylation state and/or cc single nucleotide polymorphisms (SNPs) within SEQ. ID NO. 1-5 and its complementary sequences. The set of oligoners is also useful for detecting the methylation state of all CpG dinucleotides within SEQ ID CC oligonucleotides can be used as primer oligonucleotides for the CC amplification of DNA sequences selected from SEQ ID NO. 1-5 and its complementary sequences selected from SEQ ID NO. 1-5 and its complementary sequences selected from SEQ ID NO. 1-5 and its complimentary sequences selected from SEQ ID NO. 1-5 and its comprising diseases associated with the methylation state of the gene DD3 comprising at least one nucleic acid. The methods, nucleic acids, coligonucleotide or pNA-oligomer, kit, array or the set of cligonucleotide or pNA-oligomer, kit, array or the set of cligonucleotide or the therapy of cell proliferative disorders. It can also be used for the therapy of cell proliferative disorders. The present of the sequence represents a detection oligonucleotide of the invention.
Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detecting methylation of 5' and promoter region of DD3 gene for diagnosing proliferative disorders comprising contacting target acid with a reagent that distinguishes between methylated and methylated CpG dinucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUL-2002; 2002DE-01030692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DD3; CpG dinucleotide; cell proliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hybridisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADI20814;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADI20814 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-091385/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JUN-2003; 2003WO-EP006690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004005543-A1.
                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
   16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EPIGENOMICS AG
                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTTATTTATTTTTTT
                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
   Conservative
                                                                BP; 3 A; 0 C; 1 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           detection oligonucleotide #12.
                  88.9%;
                                   1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
   <u>.</u>.
                                Score 14.8;
                    Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
     Mismatches
                    1.8e+03
                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
   2;
                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              non-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic
   Gaps
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RESULT 2117
ADM46455/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                 ADM46455 standard;
                                                                                                                                                                                                                                                                                                                                                           endothelial leukocyte adhesion molecule; ELAM-1; inflammatory ophthalmological disorder; redness;
                                                                                                                                                                                                                                                                                                                                                                                                        03-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     ADM46455;
                                                                                                                                                                                                  Bennett
                                                                                                                                                                                                               (BENN/)
(MIRA/)
                                                                                                                                                                                                                                        03-AUG-1998;
12-SEP-2000;
                                                                                                                                                                                                                                                                        02-SEP-1992;
21-JAN-1993;
                                                                                                                                                                                                                                                                                     14-AUG-1990;
                                                                                                                                                                                                                                                                                                  04-JUN-2003; 2003US-00454663
                                                                                                                                                                                                                                                                                                                           US2004033977-A1.
                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                    corneal explant;
                                                                                                                                                                                                                                                                                                                                                                        vascular
                                                                                                                                                                                                                                                                                                                                                                             Antisense; ss; human; intercellular adhesion molecule;
                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotide targeting
                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                   18-OCT-2001;
                                                                                                                                                                                                                                                                   10-FEB-1993;
                                                                                                                                                                                                                                                                                                               19-FEB-2004
                                                                                                                                                                                                                                                      12-MAY-1995;
                                                                                                                                                                                                                                                           17-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (
                                                                                                                                                                                       2004-180090/17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                               BENNETT C
                                                                                                                                                                                                   CF,
                                                                                                                                                                                                                                                                                                                                                                        Cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTTTTATGTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00128496.
2000US-00659288.
2001US-00982262.
                                                                                                                                                                                                    Mirabelli
                                                                                                                                                                                                                                                    92US-00939855.
93US-00007997.
93US-00969151.
93US-00063167.
95US-00440740.
                                                                                                                                                                                                                                                                                                                                                                       adhesion molecule; VCAM-
                                                                                                                                                                                                                                                                                      90US-00567286
                                                                                                                                                                                                                                                                                                                                                     corneal allograft rejection
                                                                                                                                                                                                                O A
                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                  쁌
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                            human ICAM-1
                                                                                                                                                                                                                                                                                                                                                             inflammation;
                                                                                                                                                                                                                                                                                                                                                                                            #4
                                                                                                                                                                                                                                                                                                                                                                                ICAM-1;
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New antisense oligonucleotide, useful for diagnosing, as research reagents and for treating disease states, which respond to modulation the synthesis or metabolism of cell adhesion molecules. e f

Example 5; SEQ ID NO 4; 72pp; English.

CC nucleotide is replaced with an adenosine, cytidine or guanosine considerable. The oligonucleotide is one of 88 disclosed antisense coligonucleotides targeting ICAM-1, vascular cell adhesion molecule (VCAM-C) vascular cell adhesion molecule (VCAM-C) or endothelial leukocyte adhesion molecule (BLAM-1). Also included are an RNA compound 8-80 nucleobases in length targeted to human ICAM-1 mRNA (where the compound specifically hybridises with the human ICAM-1 mRNA and inhibits the expression of human ICAM-1 mRNA), and a double stranded CC RNA compound having the RNA equivalent sequence of ADM46473. The CC oligonucleotide is useful for modulating the activity of the RNA and DNA cand the modulation of the synthesis and metabolism of specific cell adhesion molecules. It is also useful for the diagnosis, as research creating and for treating disease states, which respond to modulation of the synthesis or metabolism of cell adhesion molecules. The coligonucleotide is suitable for treating inflammatory ophthalmological coligonucleotide is reduced and inflammatory ophthalmological coligonucleotide is suitable for treating inflammatory ophthalmological coligonucleotide is suitable in the suitable The invention relates to an antisense oligonucleotide targeting human intercellular adhesion molecule (ICAM-1) having a sequence appearing as ADM46473. In the oligonucleotide, at least one adenosine nucleotide is replaced with a thymidine, cytidine or guanosine nucleotide, at least one thymidine nucleotide is replaced with an adenosine, cytidine or guanosine nucleotide, at least one guanosine nucleotide is replaced with an adenosine, thymidine or cytidine nucleotide or at least one cytidine nucleotide or at least one cytidine nucleotide or at least one cytidine

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밁 S

Length

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RESULT 2
ADN08321
The invention relates to a novel isolated human protein for promoting the CC transformation of 3T3 cells and contains any of the 31 amino acid contains any of the 31 amino acid contains any of the 31 amino acid contains any of the proteins described an isolated polynucleotide that encodes any of the proteins described above; a vector containing any of the said polynucleotides; a host cell contain protein by culturing any of the said polynucleotides; a host cell colynucleotide or vector described above; a process for producing the polynucleotide or vector described above; a process for producing the collecting the product; and an antibody binding specifically with the collecting the product; and an antibody binding specifically with the collecting the product; and an antibody binding specifically with the collecting the product; and an antibody binding specifically with the collecting the product; and its encoded polynucleotide are cytostatic activity. The protein and its encoded polynucleotide are useful for promoting the transformation of 3T3 cells, together with captures and in gene therapy for the transent of disorders, such as cancer. This polynucleotide sequence represents a primer for the DNA encoding one of the 3T3 transformation promoting human proteins of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          allergic reactions. The oligonucleotides can also be used to preserve corneal explants ex vivo and to prevent corneal allograft rejections. specific hybridisation exhibited by the oligonucleotides may be used assays, purifications or cellular product preparations. The present sequence is an antisense oligonucleotide targeting ICAM-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-AUG-2002; 2002CN-00136401.
16-SEP-2002; 2002CN-00136998.
16-SEP-2002; 2002CN-00136999.
                                                                                                                                                                                                                                                                                                                                                                                                                      Human protein for promoting transformation of 3T3 cells and its encoded polynucleotide, applicable in producing recombinant proteins and in gentherapy of e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-330446/30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transformation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3T3 cell transformation promoting human DNA primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN08321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADN08321 standard; DNA; 18 BP
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                                     encoding one invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            533
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                                                                                                                                                                                                                                                                                                                                                                                    2; SEQ ID NO 21; 68pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ပ်
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTCCTGCCTCAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ion; 3T3 cell;
protein; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 4 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genetic engineering; cytostatic;
therapy; cancer; human; ss; prim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
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Sequence 18 BP;

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993 CCCGGGCTCAAGCGATTC 1010

Matches

16;

Conservative

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Mismatches

Indels

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Gaps

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RESULT 2119
ADN02345/c
ID ADN0234
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                                                                          of a late-onset neurodegenerative disease to a patient which comprises
canalysing a sample from the patient to determine whether the patient has
a D-amino acid oxidase (DAO) abnormality, where the presence of a DAO
cabnormality is an indication that the patient has an increased risk of
the late-onset neurodegenerative disease. DAO is a flavin dinucleotide
(FAD) dependent oxidase which catalyses the oxidative deamination of D-
amino acids (EC.1.4.3.3). The method of the invention has neuroprotective
and antiparkinsonian applications and may be useful in determining an
increased risk of a late-onset neurodegenerative disease to a patient, as
well as in preparing a medicament for treating a late-onset
neurodegenerative disease, such as amyotrophic lateral sclerosis (ALS),
Parkinson's disease (PD) or Alzheimer's disease (AD), possibly via gene
therapy. The current sequence is that of a PCR primer of the invention
which was used during linkage analysis of human D-amino acid oxidase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                       Determining an increased risk of a late-onset neurodegenerative of to a patient comprises analyzing a sample from the patient to det whether the patient has a D-amino acid oxidase (DAO) abnormality.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  flavin dinucleotide; FAD-dependent oxidase;
p-amino acid oxidative deamination; EC.1.4.3.3; neuroprotective;
antiparkinsonian; amyotrophic lateral sclerosis; ALS; Parkinson's;
Alzheimer's; gene therapy; human; ss; PCR; primer; linkage analysis;
                                                 Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-OCT-2002; 2002GB-00023424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-2003; 2003WO-GB004337.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADN02345 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                         The invention relates to a novel method for determining an increased risk
                                                                                                                                                                                                                                                                                                                                                         Example 1; SEQ ID NO 73; 209pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-348204/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chromosome 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer 64 used during linkage analysis of human D-amino acid oxidase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       late-onset neurodegenerative disease; D-amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
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                                                 BP; 5 A;
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 88.9%;
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                                                 5 C;
                                                 5 G; 3 T; 0 U;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.8; DB 1;
Pred. No. 1.8e+03;
0; Mismatches 2;
Score 14.8;
Pred. No. 1.
                                                   0 Other;
                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid oxidase;
               Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                            determine
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                                                                                                                                                                                                                                                                                                                                                                                                                              disease
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CCTGGGTTCAAGCGATTC 1

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CC synthesis primer to RNA, separating the CDNA with an adaptor, through 5'-phosphate on strand (II) of the adaptor to single contacting the cDNA with an adaptor, ligating the cDNA contacting the cDNA with an adaptor, ligating the cRNA, separating the cDNA with an adaptor, ligating the cRNA, the adaptor through 5'-phosphate on strand (II) of the adaptor to single contacting the cDNA with an adaptor, ligating the cRNA, servanded with an adaptor to single contacting the cRNA with an adaptor to single contacting the method is consent from the method is consent from the cRNA with an amplifying the obtained ligated single consent from process, where the source of nucleic acid is chosen from blood, contacting plasma, cerebrosphinal fluid, urine, tissue samples, biopsies and collection of mRNA molecules in a sample, where the method is applied to collection of mRNA corresponding to the mRNAs by annealing one or more containing single stranded cDNA (sense) by use of streptavidin coated cCC where primer 1 is modified by biotin in the 5' end, isolating the biotin-containing single stranded cDNA (sense) by use of streptavidin coated magnetic beads, synthesising a double-stranded cDNA collection from a containing single stranded cDNA (anti-sense) by use of streptavidin coated magnetic beads, hybridised sub-population of the anti-sense cDNA is found, isolating the unhybridised sub-population of the anti-sense cDNA by use of streptavidin coated cDNA, and generating a second double-stranded cDNA collection from the unhybridised sub-population by CRC using primer 1 and populations of cDNA from language primer 1 and population single stranded cDNA.

CC production single stranded cDNA and generating a second double-stranded cDNA collection single stranded cDNA collection second collection of cDNA from a pre-selected cell collection single stranded cDNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthesizing single stranded cDNA, involves annealing cDNA synthesis primer to RNA and synthesizing first cDNA strand, ligating adaptor to single stranded cDNA using DNA ligase, and amplifying ligated single stranded cDNA fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single stranded cDNA; adaptor-mediated process; cDNA synthesis; poly-A-tail; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single stranded cDNA production poly-A-tail seqid 6.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes a method of synthesising single stranded a 5'-ligated adaptor-mediated process involving: annealing a CDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; SEQ ID NO 6; 22pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-326403/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thirstrup K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-AUG-2000; 2000US-0226954P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2004
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CDNA γď

Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

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The invention describes a method of synthesising single stranded cDNA by CC a 5'-ligated adaptor-mediated process involving: annealing a cDNA CC synthesis primer to RNA, separating the cDNA strand from the RNA, CC purifying the cDNA, contacting the cDNA with an adaptor, ligating the CNA stranded from the RNA, CC purifying the cDNA ligase, and amplifying the obtained ligated single contacting the cNA stranded represent in an molecular amplifying the obtained ligated single consected process, where the source of nucleic acid is chosen from blood, contacting the tissue sample comprises a cell population which may be single saliva. The tissue sample comprises a cell population which may be single collection of mRNA molecules in a sample, where the method is applied to collection of mRNA molecules in a sample, where the method is applied to the mRNAs by annealing one or more containing single stranded cDNA collection from a first mRNA population by the method, where primer 1 is modified by biotin in the 5' end, isolating the biotin-coated magnetic beads, synthesising a double-stranded cDNA collection from a second mRNA population according to the method, isolating the mon-biotin-coated magnetic beads, hybridising to the method, isolating the mon-biotin-coated magnetic beads, hybridising to the method, isolating the mon-biotin-coated magnetic beads, hybridising the sense by use of streptavidin coated cDNA, and generating a second double-stranded cDNA is solating the mon-biotin-coated magnetic beads, hybridising the sense to the anti-sense cDNA, where the unhybridised sub-population of the anti-sense cDNA by use of streptavidin coated cDNA, and generating a second double-stranded cDNA collection from a second manakerse cDNA and generating a second double-stranded cDNA collection from the unhybridised sub-population of the anti-sense cDNA by use of streptavidin coated cDNA, and generating a second double-stranded cDNA collection from the unhybridised sub-population of the anti-sense cDNA by use of streptavidin coated c
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pettersson NB;
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Pred. No. 1
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RESULT 2122
             or more polymorphic microsatellite loci (PML). The method comprises: PCR amplification of at least one BNA region of (I) that includes PML, using as template a DNA sample containing at least one segment of (I), and determining the length of the resulting amplicon(s). Also described are: a method of determining (M2) microsatellite markers (MM) for predisposition to a disease, associated with a gene that includes one or compressed may be a method is used to identify microsatellite markers, in a disease-related gene, that are associated with a predisposition to disease-related gene, that are associated with a predisposition to disease-sease and for prediagnosis of such diseases, especially prion diseases but also cystic fibrosis, malignant hyperthermia syndrome in pigs and metabolic diseases; also to type genes that encode milk proteins, hormones or transcription factors. The method is simpler, quicker and particularly less expensive than known methods based on sequencing. This sequence represents a primer used to genotype a region of the human prion protein (PrP) comprising a polymorphic microsatellite locus.
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                                                                                                                                                                                                                                                                                                                                                                                                       Typing genes that contain polymorphic microsatellite loci, useful for identifying predisposition to disease, by amplification and determining length of amplicons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cystic fibrosis; malignant hyperthermia syndrome; metabolic disease; milk protein; hormone; transcription factor; pT7-blue-vector; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene typing; polymorphic microsatellite loci; PML; disease predisposition; microsatellite marker; prion disease;
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                                                                                                                                                                                                                                                                                                           The invention describes a method of typing (M1) a gene (I) that has one or more polymorphic microsatellite loci (PML). The method comprises: PC
                                                                                                                                                                                                                                                                                                                                                                     Example 3;
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CC phenotypic preferences in test organisms or parts, where the test corganism are selected from organisms of the same species as the organism of interest; and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for construct code termining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a companism or interest or part containing a synthetic construct that corganism or interest or part containing a synthetic construct that conforms a regulatory polynucleotide operably linked to a tandem repeat cof a first codon fused in frame with a reporter polynucleotide that concodes a reporter protein, which produces, or is predicted to produce a celected phenotype of a parent; (5) a method of modulating the quality of a selected phenotype that is displayed by an organism of interest or part and that resulte from the expression of a parent polynucleotide that concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part concodes the polypeptide; (6) a method of enhancing the
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Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of
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P-PSDB; ADO26685.
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Pred. No. 1.8e+03;
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ADO26682/
ID ADO2
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Best Local :
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                The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the synonymous codon is selected on the basis that it exhibite a different phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms or parts, where the test organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic leader sequence encoding DNA SEQ ID NO:75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-NOV-2002; 2002US-0425163P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-NOV-2003; 2003WO-AU001487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phenotype;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYQU ) UNIV QUEENSLAND
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DB; ADO26683.
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16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phenotypic preference; phenotype modulation; leader;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
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Pred. No. 1.
Also described: (1)
ference of a first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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phenotypic preference

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an organism of

Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample

WPI; 2004-441051/41.

25-NOV-2002; 2002US-0429136P. 24-JUL-2003; 2003US-0490234P. 25-NOV-2003; 2003WO-US037948

(SEQU-)

SEQUENOM INC Nelson MR,

RB,

Braun

Þ

Kammerer

SM,

Reneland

10-JUN-2004. WO2004047623-A2 Homo

sapiens

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cc interest or its parts; (2) a synthetic polynucleotide constructed from cc the method above; (3) an organism or interest or part containing a constructed from the method above; (4) an comparise or interest or part containing a synthetic construct that comparises a regulatory polynucleotide operably linked to a tandem repeat cof a first codon fused in frame with a reporter polynucleotide that cc encodes a reporter protein, which produces, or is predicted to produce a selected phenotype or a phenotype of the same class as the selected phenotype in the organism or part; (5) a method of modulating the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that ce encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part cand that results from the expression of a parent polynucleotide that ce encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part cand that results from the expression of a parent polynucleotide that concept that is displayed by an organism of interest or part cand that results from the expression of a parent polynucleotide that concept the polypeptide. The method is useful for constructing a selected phenotype to an organism of interest or part in a different can polypeptide. It is useful for modulating the quality of a selected phenotype to an organism of interest or part in a different the polypeptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes the polypeptide. It is useful for modulating the quality of a selected phenotype that is useful for one part. The present sequence encodes the polypeptide.
Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                           phenotype displayed by an organism or part. The present a synthetic leader sequence, which is used in an example
                                                                                                                                                                                                                            synthetic leader sequence,
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RESULT 2125
ADP45818
ID ADP4581
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                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                     intercellular adhesion molecule; ICAM-1; human rhinovirus receptor; HHZ; CD54; cell surface glycoprotein P3.58; ICAM-4; Landsteiner-Wiener blood group; ICAM-5; telencephalin; chromosome 19p13;
                                                                                                                                                                                            ss; primer; PCR; SNP; single nucleotide polymorphism; probe
                                                                                                                                                                                                                         breast cancer; cytostatic; gene therapy;
intercellular adhesion molecule; ICAM-1;
                                                                                                                                                                                                                                                   Extend primer 10 used to genotype human ICAM-1/ICAM-4/ICAM-5
                                                                                                                                                                                                                                                                      26-AUG-2004
                                                                                                                                                                                                                                                                                       ADP45818;
                                                                                                                                                                                                                                                                                                          ADP45818 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                 al Similarity
16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                    1.5%;
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                                                                                                                                                                                                                                                                                                                                                                         445
                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                   human;
human rhinovirus receptor; BB2;
                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
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RESULT 2126
ADP86130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel method for identifying a subject at risk of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cycostatic applications and may be useful for identifying a subject at risk of the cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The CC current sequence is that of an Extend primer (also described as probe) of the invention which was used to genetype human intercellular adhesion CC molecule ICAM-1/ICAM-5 gDNA. ICAM-1 (human rhinovirus receptor; BB2 (D54; cell surface glycoprotein P3.58) has been mapped to chromosomal position 19p13.2-cen and ICAM-5 (telencephalin) has been mapped to chromosomal position 19p13.2-cen and ICAM-5 (telencephalin) has been mapped to chromosomal position 19p13.2-cen and ICAM-5 (telencephalin) has been mapped to chromosomal position 19p13.2.
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 4 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 4; Page 83; 289pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CpG immunostimulatory oligonucleotide; immune response; allergy; asthma; viral infection; bacterial infection; cancer; lymphoma; intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
           New oligonucleotides, useful for treating allergy or asthma, viral and bacterial infections, and cancer, e.g. biliary tract cancer, breast
                                                                                                                                                                                                                                                                                                                                                                                                                        Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CpG immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP86130 standard; DNA; 18
                                                              WPI; 2004-487902/46.
                                                                                                                                                                           11-DEC-2002; 2002US-0432409P.
25-SEP-2003; 2003US-0506108P.
                                                                                                                                                                                                                            11-DEC-2003; 2003WO-US039775
                                                                                                                                                                                                                                                            24-JUN-2004
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                                                                                                                              COLEY PHARM GROUP INC COLEY PHARM GMBH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGGGATTACAGGCGTG 411
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                                                                                            Jurk M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                         mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; phosphorothicate; ss.
                                                                                            Vollmer J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                       "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,,</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                              Uhlmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.8e+03;
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RESULT 2127
ADQ30328
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a class of CpG immunostimulatory oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that are useful for stimulating an immune response. Oligonucleotides and compositions of the invention are useful for treating allergy or asthma, viral and bacterial infections and cancer e.g. biliary tract cancer, viral and bacterial infections and cancer e.g. biliary tract cancer, viral cancer, cervical cancer, choricocarcinoma, colon cancer, endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms, liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma, neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer, rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain and CNS cancer, connective tissue cancer, osophageal cancer, brain cancer, longkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer, testicular cancer, as well as other carcinomas and sarcomas. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds; VR1 receptor; vanilloid receptor type 1; modulator; pain transmission; primary sensory neuron; transcription facto detection; MZF1; NFkappaB; NFAT; GATA1; sensitivity disorder; hypalgesia; hyperalgesia; neuralgia; myalgia; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U;
                                                                                                                                            New nucleic acid that modulates expression of the vanilloid receptor-1, useful for control of pain or sensitivity disorders, comprises sequence from control regions of the receptor gene.
                                                                                                                                                                                                                                                                                                              09-DEC-2002; 2002DE-01057421
                                                                                                                                                                                                                                                                                                                                               01-DEC-2003; 2003WO-EP013522.
                                                                                                                                                                                                                                                                                                                                                                                                              WO2004053120-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human VR1 exon 1d transcription factor binding fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADQ30328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADQ30328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example;
                                                                            This invention
                                                                                                             Disclosure; Page 52; 68pp; German.
                                                                                                                                                                                                                                                                                                                                                                               24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention is also useful in gene therapy. The present sequence is a CpG immunostimulatory oligonucleotide.
                                                                                                                                                                                                                                                                              CHEF ) GRUENENTHAL GMBH.
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16; Conserv
                                                               having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard; DNA; 18
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                                                                                                                                                                                                                                             Bieller A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                               at least one region that
                                                                            describes a novel nucleic acid containing a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104pp; English
                                                                                                                                                                                                                                                 Schaefer MKH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            445
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                                                               modulates expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 18;
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                                                                of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              analgesia;
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(vanilloid receptor type 1) receptor, or a functional derivative, allor fragment of this region, or a sequence that hybridises to it under standard conditions. The VR1 modulator is derived from one or more of positions 221931-223344 of GenBank AL670399, 31673-36359 of AL663116,

derivative, allele

AL663116, or

44731-43231

or 36616-33151 of AF168787 and is involved in transmission of

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THE PROOF TO SEE THE PROOF TO SEE THE PROOF TO SEE THE PROOF THE P
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ABZ45509/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CC pain, particularly in primary sensory neurons. The invention also containing particularly in primary sensory neurons. The invention also containing expression of the VR1 modulator, host cells containing to modulating expression of the VR1 receptor by introducing the condulation or the vector into a cell that contains the VR1 gene. The cc products of the invention are used for detecting a transcription factor from its binding to a regulatory sequence (or a double-stranded coligonucleotide fragment of it), e.g. by Western blotting or enzyme-cl inked immunosorbant assay, particularly for diagnosis of diseases case of associated with overexpression or underexpression of the transcription factor. The region that modulates VR1 receptor expression includes a binding site for a transcription factor, e.g. MZF1, NFkappaB, NFAT or care used for prevention or treatment of pain, also for treating them, cc sensitivity disorders, e.g. analgesia, hypalgesia or hyperalgesia, also contain sequence represents a fragment of human VR1 exon 1d DNA cc which is capable of binding to a transcription factor.
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polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18
Identifying individuals having a polymorphism, useful for determining the effectiveness or side effect of a drug or treatment protocol, comprises detecting at least one polymorphism in the drug metabolizing enzyme nucleic acid.
                                                                                                                                                                                                                                                                                                                  27-DEC-2000; 2000JP-00399443.
02-MAY-2001; 2001JP-00135256.
27-AUG-2001; 2001JP-00256862.
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                                                                                                                                                 WPI; 2002-583571/62
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                                                                                                                                                                                                        Sekine A,
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/*tag= a
/standard_name= "Single nucleotide polymorphism (SNP)"
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
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Claim
23; Page 102; 2785pp; English
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CC valuating and screening drugs using genetic polymorphism data. Genetic colling the particularly that relating to single nucleotide colling polymorphism (SNPs), may be used in studying the relationship between colling sugar variations and human diseases, conditions, and responses to CNA sequence variations and human diseases. SNPs are also useful as polymorphism markers for discovering genes that cause or exacerbate certain diseases. SNPs are particularly useful colling the above respects as they are stable in populations, occur can the above respects as they are stable in populations, occur can the above respects as they are stable in populations, occur can genes encoding drug metabolising enzymes allows the customisation of colling drug metabolising enzymes allows the customisation of colling therapies based upon the genetic profile of individual patients.

CC reduce the likelihood of adverse reactions, thereby increasing safety. CC methods of the invention are also useful in the drug discovery and collinical trials only if their genetic profiles indicate that they are collinical trials only if their genetic profiles indicate that they are capable of responding to a particular drug or drug class, and previously failed drug candidates could be revived if they were matched with more appropriate patient populations. The methods, data and compositions of the reage of the reactions of the reage in the range of polymorphisms may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABZ43217-ABZ50887 using a variety of detection assays, including hybridisation assays, nucleic acid arrays and PCR-based methods. The invention also encompasses methods of appropriate patient populations. The methods, data and compositions of the invention may therefore lead to an increase in the range of possible drug targets and decreases in the number of adverse drug reactions, failed drug trials, the time taken for a drug to be approved, the length of time patients are on medication and the number of different medications a patient needs to take before finding an effective therapy encoding enzymes associated with drug metabolism. The invention relates to methods and compositions for identifying individuals who have at least one polymorphism in such drug metabolising enzyme-encoding genes. Sequences ABZ43217-ABZ50887 represent polymorphic sites within genes

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Sequence 41 BP;
 8
A;
12 C; 13 G; 8 T; 0 U; 0 Other;
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밁
              S
                               Matches
                                      Query Match
Best Local 9
              619 TGAGACAGAGTCTCAACTCTGTCACCCAGGCTGG
35
                                        Similarity
TGAGCCAAGATCTCGCCACTGCAGTCCAGCCTGG
                                        1.5%;
                             0;
                                                 Score 14.8;
                                        Pred.
                                 Mismatches
                                         o
O
                                         2.2e+03;
                                                  DB
                 652
                                 12;
                                                 Length 41;
                                  Indels
                                 0;
                                  Gaps
                                  0
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RESULT 2129
ABZ46915/c
                   ABZ46915 standard; DNA;
ABZ46915
                    41
                    股
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26-JUN-2003

(first entry)

Human ATP-binding cassette ABCA7 gene polymorphic site, #3699

Human; drug metabolising enzyme; gene; drug metabolism; chromos polymorphic site; drug evaluation; drug screening; genotyping; genetic profiling; therapeutic customisation; adverse reaction; clinical trial; drug approval; single nucleotide polymorphism; ning; genotyping; adverse reaction; chromosome SNP; ds 19;

Homo sapiens

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Key
variation
                  variation
                            Location/Qualifiers replace(17,A) /*tag= a
                /standard_name= "Single nucleotide
replace(21,T)
     /*tag= b
/standard_name= "Single nucleotide polymorphism (SNP)"
                        polymorphism (SNP)"
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WO200252044-A2

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RXB
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                                                                                                                                                                                                                                                                                                                                                                                                                                    CC in the above respects as they are stable in populations, occur frequently, and have lower mutation rates than other genome variations cours such as repeating sequences. The detection and analysis of polymorphisms in genes encoding drug metabolising enzymes allows the customisation of cur therapies based upon the genetic profile of individual patients. CC This would not only take the guesswork out of selecting the drug with the createst therapeutic effect for a particular patient, but would also could not only take the guesswork out of selecting the drug with the createst therapeutic effect for a particular patient, but would also could be invention are also useful in the drug discovery and comproval processes. For example, individuals could be selected for capable of responding to a particular drug or drug class, and previously cfailed drug candidates could be revived if they were matched with more capable of responding to a particular drug or drug class, and previously capable of the invention may therefore lead to a an increase in the range of compositions of the invention may therefore lead to a an increase in the range of compositions, failed drug trials, the time taken for a drug to be approved, the length of time patients are on medication and the number of different capable of the patients are on medication and the number of different capable of the patients are on medication and the number of different capable of the patients are on medication and the number of different capable of the patient patient patient patient patient patient patients are on medication and the number of different capable drug trials.
                                                                                               RESULT 2130
                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequences ABZ43217-ABZ50887 represent polymorphic sites within genes encoding enzymes associated with drug metabolism. The invention relates to methods and compositions for identifying individuals who have at least one polymorphism in such drug metabolising enzyme-encoding genes. The polymorphism may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABZ43217-ABZ50887 using a variety of detection assays, including hybridisation assays, nucleic acid arrays and PCR-based methods. The invention also encompasses methods of
ABZ45508;
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02-MAY-2001; 2001JP-00135256
27-AUG-2001; 2001JP-00256862
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                                              ABZ45508 standard; DNA; 41 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying individuals having a polymorphism, useful for determining the effectiveness or side effect of a drug or treatment protocol, comprises detecting at least one polymorphism in the drug metabolizing enzyme nucleic acid.
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                                                                                                                                                                                                                                                                                                                                                                        Sequence 41
                                                                                                                                                                                                                                                                                                                                                                                                                  medications a patient needs to take before finding an effective therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIKE ) RIKEN KK
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                                                                                                                                                                                                                                                                      l Similarity
22; Conserv
                                                                                                                                                                       TGAGCCAAGATCTCGCCACTGCAGTCCAGCCTGG 2
                                                                                                                                                                                                                   TGAGACAGAGTCTCAACTCTGTCACCCAGGCTGG 652
                                                                                                                                                                                                                                                                                                                                                                           BP;
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Pred. No. 2
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                                                                                                                                                                                                                                                                                                                       BB
                                                                                                                                                                                                                                                                                                                     1; Length 41;
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                                                                                                                                                                                                                                                                      Gaps
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Human; drug metabolising enzyme; gene; drug metabolism; chromosome 19; polymozphic site; drug evaluation; drug screening; genotyping; genetic profiling; therapautic customisation; adverse reaction; clinical trial; drug approval; single nucleotide polymorphism; SNP; ds
                     Identifying individuals having a polymorphism, useful for determining the effectiveness or side effect of a drug or treatment protocol, comprises detecting at least one polymorphism in the drug metabolizing enzyme
                                                                                                                                                                                                   Nakamura Y, Sekine A,
                                                                                                                                                                                                                                                                                                                27-DEC-2000; 2000JP-00399443
02-MAY-2001; 2001JP-00135256
27-AUG-2001; 2001JP-00256862
                                                                                                                                                                                                                                                                                                                                                                                                                                     27-DEC-2001; 2001WO-JP011592.
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nucleic acid
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                                                                                                                                                                                                                                                             (RIKE ) RIKEN KK
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/*tag= a
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Claim 23; Page 102; 2785pp; English. Sequences ABZ43217-ABZ50887 represent polymorphic sites within genes

CC evaluating and screening drugs using genetic polymorphism data. Genetic CC polymorphism data, particularly that relating to single nucleotide CC polymorphism (SNPs), may be used in studying the relationship between CC DNA sequence variations and human diseases, conditions, and responses to that cause or exacerbate certain diseases. SNPs are particularly useful in the above respects as they are stable in populations, occur frequently, and have lower mutation rates than other genome variation of Such as repeating sequences. The detection and analysis of polymorphisms CC in genes encoding drug metabolising enzymes allows the customisation of CC drug therapies based upon the genetic profile of individual patients. CC This would not only take the guesswork out of selecting the drug with the CC greatest therapeutic effect for a particular patient, but would also CC reduce the likelihood of adverse reactions, thereby increasing safety. CC clinical trials only if their genetic profiles indicate that they are CC capable of responding to a particular drug out they are capable of responding to a particular drug of the selected for CC failed drug canadates could be revived if they were matched with more appropriate patient, populations. The methods, data and compositions of the invention may therefore lead to a an increase in the range of compositions of the length of time patients are on medication and the number of different medications a patient needs to take before finding an effective therapy one polymorphism in such drug metabolising enzyme-encoding genes. The polymorphisms may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABZ43217-ABZ50887 using a variety of detection assays, including hybridisation assays, nucleic acid arrays and PCR-based methods. The invention also encompasses methods of encoding enzymes associated with drug metabolism. The invention relates to methods and compositions for identifying individuals who have at least

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RESULT 2131
ABZ46914/c
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XX ABZ4691
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polymorphic
genetic prof
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Sequences ABZ43217-ABZ50887 represent polymorphic sites within genes encoding enzymes associated with drug metabolism. The invention relates to methods and compositions for identifying individuals who have at least one polymorphism in such drug metabolising enzyme-encoding genes. The polymorphisms may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABZ43217-ABZ50887 using a variety of detection assays, including hybridisation assays, nucleic acid arrays and PCR-based methods. The invention also encompasses methods of evaluating and screening drugs using genetic polymorphism data, particularly that relating to single nucleotide polymorphisms (SNPs), may be used in studying the relationship between DNA sequence variations and human diseases, conditions, and responses to drugs. SNPs are also useful as polymorphism markers for discovering genes
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02-MAY-2001; 2001JP-00135256.
27-AUG-2001; 2001JP-00256862.
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clinical trial; drug approval; single nucleotide polymorphism;
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RESULT 2132
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                       Human; cholinergic receptor, nicotinic, beta polypeptide 3; CHRNB3; single nucleotide polymorphism; SNP; drug screening; Alzheimer's disease; neurological disorder; gene therapy; genotyping; haplotyping; primer; allele-specific oligonucleotide; ASO; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human CHRNB3 gene polymorphism detecting ASO primer #11.
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CHOI J Y
KOSHY B.
                                                                                                                                                                                                                 GENAISSANCE PHARM INC
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0; Mismatches
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New polynucleotide, useful for studying expression and function of CHRNB3, comprises polymorphic variant of cholinergic receptor, nice beta polypeptide 3 (CHRNB3) gene, containing one of polymorphic si

nicotinic, c sites PS1

2001-626425/72

Claim 15;

Page 15; 68pp; English

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RESULT 2133
AAD20695
ID AAD2069
XX AAD2069
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XX AAD2069
XX AAD2069
XX AAD2069
XX Human;
KW Human;
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KW Alzhe;
XX Prime;
XX Homo
XX Alzhe;
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XX Homo
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Matches 14;
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         present se
                                          The invention relates to methods for haplotyping glycoprotein Ib (platelet) alpha polypeptide (GPIBA) gene of an individual. The method involves determining if the individual has one of the GPIBA haplotypes haplotype pairs. The methods of the invention are useful for disease diagnosis and in the discovery and development of drugs for treating diseases associated with GPIBA activity e.g. Bernard-Soulier syndrome, platelet-type von Willebrand disease, HIV and Alzheimer's disease. The present sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is allele-specific oligonucleotide (ASO) primer used for the sequence is
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New haplotypes of the glycoprotein Ib platelet alpha polypeptide gene useful for diagnosis and drug discovery for treating Bernard Soulier syndrome, platelet-type von Willebrand disease, HIV and Alzheimer's
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Page 14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; aldo-keto reductase family 1 member B1; aldose reductase; ss; AKR1B1; chromosome 7q35; detection; polymorphism; ASO; probe; primer; allele-specific oligonucleotide; antidiabetic; gene therapy; diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         yene useful in studying expression and function of the protein, useful for screening drugs to treat diseases e.g. diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABL01146 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel polymorphic variants of aldo-keto reductase family 1, member bl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200179223-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymorphisms in the human AKR1B1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 16; Page 14; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-075056/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-2000; 2000US-0196315P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-OCT-2001.
                                                                                                                                                                                                         AAD26858
Homo sapiens
                                                       Human; G-protein coupled receptor 4; GPR4; haplotyping; polymorphism;
                                                                                       Human GPR4 gene polymorphism detecting ASO primer #17.
                                                                                                                                  26-MAR-2002
                                     allele-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  screening
                                                                                                                                                                                                                                                                                                                                            395 CTGGGATTACAGGCG 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AKR1B1
                                                                                                                                                                                                                                                                                                                                                                                  14;
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                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                                                      CTGGGATTACAGGYG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nandabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 3 A; 2 C; 6 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                drugs to treat diseases e.g. diabetes.
                                     oligonucleotide; ASO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14.6;
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                                     primer;
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                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Length 15;
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diabetes.
                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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RESULT 2137
ABV99766/c
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to G-protein coupled receptor 4 (GPR4) gene variants. The data about the GPR4 polymucleotides and polypeptides and the polymorphisms associated with them are useful for haplotyping at the GPR4 locus. Allele-specific oligonucleotide (ASO) is useful as probes and primers for assaying a polymorphism in GPR4 gene. The present sequence is an ASO primer used to detect human GPR4 gene polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Haplotyping, (H1), the individual, comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-097579/13.
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New 6-phosphofruoto-2-kinase/fructose-2,6-bisphosphatase 2 (PFKFB2) gene variants, for improving efficiency and reliability in the development of drugs for treating diseases associated with PFKFB2 activity e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; antidiabetic; gene therapy; cancer; diabe allele specific oligonucleotide; probe; polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2; PFKF cytostatic; antidiabetic; gene therapy; cancer; diabetes; ss; ASO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 15; Page 13; 61pp; English.
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                                                                                          WPI;
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                                                                                                                                                                                                                                                                                                                                                    WO200194363-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human PFKFB2 allele
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                                                                                                                                                                                                                                                              07-JUN-2001; 2001WO-US018458
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                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                          2002-566434/60.
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                                                                                                                                Kazemi A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 4 A; 2 C; 6 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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93.3%;
                                                                                                                                  Koshy B;
                                                                                                                                                                             PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G-protein coupled receptor 4 (GPR4) gene of determining which haplotype an individual.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kazemi A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.6; DB 1
Pred. No. 1.6e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PFKFB2;
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Claim 16; Page 13; 95pp; English

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ABL51983/c
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Best Local S
Matches 14
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The present invention describes an isolated polynucleotide (I) having a sequence (S1) comprising soluble carrier family 18 (vesicular monoamine), member 2 (SLC18A2) isogene selected from 49 isogenes with regions of a sequence (SS) of 40023 bp (see ABL51954), and defined by a corresponding set of polymorphisms whose locations and identities are given in the specification; or a sequence (S2) complementary to (S1). (I) has antiinflammatory and neuroleptic activities, and can be used in gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 2 A; 1 C; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vesicular monoamine transporter; VMAT2; polymorphic site; SNP;
single nucleotide polymorphism; antiinflammatory; neuroleptic;
haplotyping; genotyping; respiratory inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUL-2002
                                                                                                                                  Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neuropsychiatric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human;
                                                                                                                                                                                                                                                                                            (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                               neuropsychiatric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 681 CAACCTCTGCCTCCC 695
                                                                                                                                                                                              genetic variants of soluble carrier family 18 (vesicular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SLC18A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      solute carrier family 18 member 2; SLC18A2; vesicular monoamine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                              AE,
                                                                                                                               Page 14; 183pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "polymorphic site indicated by an ambiguity base"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disorder; monoaminergic brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93.3%;
                                                                                                                                                                               gene useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      specific oligonucleotide primer SEQ ID NO:31
                                                                                                                                                               disorders involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.6;
Pred. No. 1
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                                                                                                                                                                               for screening
                                                                                                                                                                                                                                                            Sausker
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                                                                                                                                                               ening drugs to treat monoaminergic brain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       system; primer; ss
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                                                                                                                                                               systems
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RESULT 2139
ABK32790/c
ID ABK32790/c
ID ABK32790/X
AC ABK3279
XX ABK3279
XX ABK3279
XX ALZheim
KW Alzheim
KW Alzheim
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Best Local S
Matches 14
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                          The invention relates to an isolated polypeptide comprising a sequence which is a polymorphic variant of a reference sequence for the amyloid beta precursor protein binding protein 1, 59kD (APPBP1) protein or its fragment. The polymorphic variants are useful in studying the expression and function of APPBP1, in expressing APPBP1 protein for use in screening for candidate drugs to treat diseases related to APPBP1 activity, in studying the effect of the variation on the biological activity of APPBP1, and the binding affinity of candidate drugs targeting APPBP1 for the treatment of disorders such as Alzheimer's disease. The haplotyping methods are useful in validating APPBP1 as a candidate target for treating a specific condition or disease predicted to be associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; amyloid beta precursor protein binding protein 1; APPBP1; probe; Alzheimer's disease; transgenic animal; platelet aggregation; single nucleotide polymorphism; SNP; allele-specific oligonucleotide; ss.
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      treating a specific APPBP1 activity, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amyloid beta precursor protein binding protein 159 kD (APPBP1) gene polymorphic variants, useful e.g. in studying the expression and function of APPBP1 and screening candidate drugs for treating Alzheimer's disease.
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Stephens CJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENA-) GENAISSANCE PHARM INC.
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The present invention relates to a new cholinergic receptor, muscarinic 5 (CHRM5) polynucleotide comprising a sequence which is a polymorphic variant for a reference sequence for the CHRM5 gene or its fragment, or a polymorphic variant of a reference sequence for a CHRM5 cDNA or its confidence. The invention is useful in drug screening assays. The molecules of the invention are useful in studying the expression and function of chrys, and in expressing CHRM5 protein for use in screening for candidate drugs to treat diseases related to CHRM5 activity. The methods of the convention are useful in developing diagnostic tests and therapeutic condidate drugs for treating specific condition or disease associated condidate drugs for treating specific condition or disease associated considered the haplotypes or one of the haplotype pairs. The invention is useful in determining whether an individual custoful in a variety of diagnostic and prognostic formats and therapeutic methods. The invention is also useful in genotyping and/or haplotyping condition or disease associated useful in a variety of diagnostic and prognostic formats and therapeutic methods. The invention is also useful in genotyping and/or haplotyping condition of the haplotyping and/or haploty
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human CHRM5
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Sausker EA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel cholinergic receptor, muscarinic 5 polynucleotide useful therapeutically and in screening for candidate drug to treat of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-435523/46.
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                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 14; Page 13; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      related to
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RESULT 2141
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                                         CC (CHRM5) polynucleotide comprising a sequence which is a polymorphic comprising a sequence which is a polymorphic comprising a sequence which is a polymorphic comprising a sequence for the CHRM5 gene or its fragment, or a CC polymorphic variant for a reference sequence for the CHRM5 cDNA or its fragment. The invention is useful in drug screening assays. The molecules CC fragment. The invention is useful in drug screening assays. The molecules CC cHRM5, and in expressing CHRM5 protein for use in screening for candidate CC drugs to treat diseases related to CHRM5 activity. The methods of the CHRM5 protein for use in screening for candidate composed to treat diseases related to CHRM5 activity. The methods of the CC candidate drugs for treating specific condition or disease associated composed to the CHRM5 activity and is useful in the design of clinical trials of CC candidate drugs for treating specific condition or disease associated composed the CHRM5 activity and is useful in determining whether an individual CC with CHRM5 activity and is useful in genctype pairs. The invention is useful in a variety of diagnostic and prognostic formats and therapeutic methods. The invention is also useful in genctyping and/or haplocyping the CRRM5 gene in an individual The present nucleic acid sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASO; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CHRM5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK81766 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                            Claim 14; Page 13; 72pp; English.
                              polymorphisms in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               847 CCTCGGCCTCCCAAA 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene polymorphism detection ASO probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stephens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; 8 C; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ű;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Choi
                                  CHRM5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 2 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.6;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'n,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                            erinic 5 polynucleotide useful for candidate drug to treat of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Denton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .6e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide (ASO) invention to detect
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                                                                                                                                                                                                                                                                                                                                                                                                               treat diseases
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Sequence 15

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Length 15;

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ABK81777/c
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Best Local S
Matches 14
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Best Local S
Matches 14
                                                                                                            fragment. The invention is useful in drug screening assays. The molecules of the invention are useful in studying the expression and function of CHRM5, and in expressing CHRM5 protein for use in screening for candidate drugs to treat diseases related to CHRM5 activity. The methods of the invention are useful in developing diagnostic tests and therapeutic treatments. The method is also useful in the design of clinical trials of candidate drugs for treating specific condition or disease associated with CHRM5 activity and is useful in determining whether an individual has one of the haplotypes or one of the haplotype pairs. The invention is useful in a variety of diagnostic and prognostic formats and therapeutic methods. The invention is also useful in genetyping and/or haplotyping the CHRM5 gene in an individual. The present nucleic acid sequence represents one of a collection of allele-specific oligonucleotide (ASO) primers (ABK81795-ABK81794) that were used in the invention to detect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel cholinergic receptor, muscarinic 5 polynucleotide useful therapeutically and in screening for candidate drug to treat diseases related to the receptor activity.
                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a new cholinergic receptor, muscarinic (CHRMS) polynucleotide comprising a sequence which is a polymorphic variant for a reference sequence for the CHRMS gene or its fragment, or polymorphic variant of a reference sequence for a CHRMS cDNA or its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-435523/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; cholinergic receptor muscarinic 5; CHRM5; genotyping; haplotyping; single nucleotide polymorphism; SNP; allele-specific oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human CHRM5
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 14; Page 13; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sausker EA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bieglecki KM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-OCT-2001; 2001WO-US032022.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer; ss.
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                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polymorphism detection ASO primer #3
                                                                                                  the human CHRM5 gene
                                                                 A;
                 1.5%;
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                                                                   5 C; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                 G; 4 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.6; DB 1;
Pred. No. 1.6e+03;
                 Score 14.6; DB 1; Length 15; Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nandabalan
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XXXXXXXX
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                                                                                                                                  RESULT 2144
ABA93847
                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                      The Alu primers PDJ34 and 2484 (AAQ45257 and AAQ45258) were used to amplify DNA from yeast artificial chromosomes as part of a cloning procedure to isolate probes for specific chromosomal abnormalities. particular, probes to diagnose Prader-Willi/Angelman Syndrome were identified. The majority of PWS/Angelman patients are deleted for a common set of markers including ML34, IR4-3R, TD189-1 and TD3-21.
                                                                                                                                                                                                                                                                                                Sequence 35 BP; 5 A; 9 C; 8 G; 5 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diagnosis of genetic disorders associated with chromosomal abnormalities and uniparental disomy, e.g. Prader-Willi:Angelman syndrome - using in situ hybridisation using probes spanning the IR4-3R or GABRB3 regions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yeast Artificial Chromosome; YAC; polymerase chain reaction; sequence tagged site; genetic disorder; diagnosis; abnormali Prader-Willi; Angelman; Beckwith-Wiedermann; syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alu primer PDJ34 to amplify Yeast Artificial Chromosome
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28-OCT-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 32; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1994-118484/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Airhart SD,
                                                                                                                     ABA93847 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA; 35
                                                                                                                                                                                       GAGCYRWGATYRYRCCAYTGCACTCCAGCCTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                 (first entry)
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                                                                                                                       DNA;
                                                                                                                                                                                                                                                       1.5%;
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                                                                                                                                                                                                                                           Score 14.6; DB 1
Pred. No. 2.3e+03
6; Mismatches 1
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                                                                                                                                                                                        34
                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                              Indels
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Human; GASC1; chromosome 9;

gene amplified in squamous cell carcinoma 1; cancer; chromosome 9p23-24; cell differentiation; gene thera

gene therapy;

Human GASC1 PCR primer SEQ ID NO:5.

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes human GASC1 (gene amplified in squamous cell carcinoma 1). GASC1 has been located to the p23-24 region of human chromosome 9. GASC1 can be used in the diagnosis and investigation of diseases with which cell differentiation and proliferation are associated, such as cancer. It can also be used in gene therapy of these diseases, and screening substances for their ability to modify the expression of GASC1 and for use as drugs. The present sequence represents a PCR primer for human GASC1, which is used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cell proliferation such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene GASC1 amplified in squamous cell carcinoma and its expression product for diagnosis investigation and treatment of disorders involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-090209/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUN-2000; 2000JP-00174946
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                                                                                                                                                                                           single nucleotide
                                                                                                                                                                                                                               Human chromosome 19 single nucleotide polymorphism detecting probe #22
                                                                                                                                                         Synthetic
                                                                                                                                                                                           sequence polymorphism analysis; human; chromosome 19q; cancer; RAI; ss;
single nucleotide polymorphism; SNP; probe.
                                                                                                                                                                                                                                                         06-MAY-2004
                                                                                                                                                                                                                                                                                                         ADK41334 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SAKA ) OTSUKA PHARM CO LTD
27-JUN-2002;
                        27-JUN-2003;
                                                08-JAN-2004
                                                                       WO2004003229-A2
                                                                                                                      variation
                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                          392 GTGCTGGGATTACAGGCGTGCAGCCGTGCCTGG 424
                                                                                                                                                                                                                                                                                                                                                                                                                     1 Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                       GAGCYRWGATYRYRCCAYTGCACTCCAGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 77; 82pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 5
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                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
2002DK-00001005..
                        2003WO-DK000448
                                                                                                                                                                                                                                                         (first
                                                                                                       Location/Qualifiers replace(20,G)
/*tag= a
                                                                                             /*tag= a
/standard_name= "Single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۶
                                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                51.5%;
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                                                                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 C; 8 G; 5 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                             1.5%;
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Pred. No. 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                     10;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 35;
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                                                                                               polymorphism"
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27-DEC-2001; 2001WO-JP011592

04-JUL-2002.

WO200252044-A2

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RESULT 2146
ABZ43589
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          estimating a treatment response of an individual suffering from cancer to a disease treatment; an antibody directed to an epitope of a RAI gene product; and a kit for use in the method of estimating the disease risk or prognosis of an individual or for estimating a treatment response of an individual suffering from cancer to a disease treatment, comprising at least one primer or probe and optionally amplifying means for nucleic acid amplification. The novel method is useful for estimating the disease risk or prognosis of an individual or for estimating a treatment response of an individual suffering from cancer to a disease treatment. This polynucleotide sequence represents a probe used for detecting single nucleotide polymorphisms in the DNA of human chromosome 19 of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prognosis of an individual by sequence polymorphism analysis, especially polymorphisms in the human chromosome 19g. The invention further relates to: estimating a treatment response of an individual suffering from cancer to a disease treatment; a primer or probe for use in the method of estimating the disease risk or prognosis of an individual or for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-2002; 2002DK-00001500
25-FEB-2003; 2003DK-00000289
29-APR-2003; 2003DK-00000639
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Estimating the disease risk or prognosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
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                                                                                                                     Key
variation
                                                                                                                                                                                             Human; drug metabolising enzyme; gene; drug metabolism; chromos polymorphic site; drug evaluation; drug screening; genotyping; genetic profiling; therapeutic customisation; adverse reaction; clinical trial; drug approval; single nucleotide polymorphism;
                                                                                                                                                                                                                                                                       Human cerebroside transferase CST gene polymorphic site,
                                                                                                                                                                                                                                                                                                                                                                     ABZ43589 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40
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                                                                                                                                                                                                                                                                                                                                       ABZ43589;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18; SEQ ID NO 92; 145pp;
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ARBEJDSMILJO
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                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                     replace(21,A)
/*tag= a
/standard_name= "Single"
                                                                                                                                     Location/Qualifiers
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Pred. No. 2.2e+03;
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                                                                                          nucleotide polymorphism (SNP)"
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                                                                                                                                                                                                   SNP;
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RESULT 2147
ABZ49741
ID ABZ4974
XX ABZ4974
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                                                                                                                                                                                                                                                                                                                                                                                                     CC variety of detection assays, including hybridisation assays, nucleid acid cc arrays and PCR-based methods. The invention also encompasses methods of cevaluating and screening drugs using genetic polymorphism data. Genetic CC polymorphism data, particularly that relating to single nucleotide CC polymorphisms (SNPs), may be used in studying the relationship between CC drugs. SNPs are also useful as polymorphism markers for discovering genes that cause or exacerbate certain diseases, conditions, and responses to CC frequently, and have lower mutation rates than other genome variations CC such as repeating sequences. The detection and analysis of polymorphisms CC such as repeating sequences. The detection and analysis of polymorphisms CC frig therapies based upon the genetic profile of individual patients. CC greatest therapeutic effect for a particular patient, but would also CC reduce the likelihood of adverse reactions, thereby increasing safety. Methods of the invention are also useful in the drug discovery and CC approval processes. For example, individuals tould be selected for CC posable of responding to a particular drug or drug class, and previously capacitions, failed drug canaly if their genetic profiles indicate that they are capacitions, failed drug trials, the time taken for a drug to be approved, the length of time patients are on medication and the number of different constaints apatient needs to take before finding an effective therapy.
                                                                                                                                                                                                                                                                                                                                                               Query Match
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02-MAY-2001; 2001JP-00135256
27-AUG-2001; 2001JP-00256862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     one polymorphism in such drug metabolising enzyme-encoding genes. The polymorphisms may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABZ43217-ABZ50887 using a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying individuals having a polymorphism, useful for determining the effectiveness or side effect of a drug or treatment protocol, comprises detecting at least one polymorphism in the drug metabolizing enzyme
                      Human cerebroside transferase CST gene polymorphic site, #6523
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                                                              26-JUN-2003
                                                                                                                                           ABZ49741 standard; DNA; 41 BP
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 23; Page 70; 2785pp; English
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enzymes associated with drug metabolism. The invention rela
                                                                                                                                                                                                                                                                                  AAGTGCTAGATACAGGACTGGCCACCATG 288
                                                                                                                                                                                                                                             AGGAGTTCGAGACCAGCCTGGCCAACATG
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Pred. No. 2
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CC encoding enzymes associated with drug metabolism. The invention relates ct omethods and compositions for identifying individuals who have at least cone polymorphisms in such drug metabolising enzyme-encoding genes. The cplymorphisms may be identified in a nucleic acid sample using probes or primers specific for a sequence selected from ABS43217-ABS50887 using a crariety of detection assays, including hybridisation assays, nucleic acid arrays and pCR-based methods. The invention also encompasses methods of cevaluating and screening drugs using genetic polymorphism data, particularly that relating to single nucleotide colonymorphism (aNPs), may be used in studying the relationship between CC polymorphism (aNPs), may be used in studying the relationship between CC drugs. SNPs are also useful as polymorphism markers for discovering genes that cause or exacerbate certain diseases, conditions, and responses to CC drugs. SNPs are also useful as polymorphism markers for discovering genes creation are particularly useful contractions are particularly useful contractions are particularly useful contractions are repeated as they are stable in populations, occur that cause or exacerbate certain diseases. SNPs are particularly useful contraction as repeating sequences. The detection and analysis of polymorphisms compasses ancoding drug metabolising enzymes allows the customisation of drug therapies based upon the genetic profile of individual patients. CC drug therapies based upon the guesswork out of selecting the drug with the cc greatest therapeutic effect for a particular patient, but would also creduce the likelihood of adverse reactions, thereby increasing safety. CC approval processes. For example, individuals could be selected for approval processes. For example, individuals could be selected for approval trials only if their genetic profiles indicate that they are capable of responding to a particular drug or drug class, and previously considered the patients are on medication and the number of different medicat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; drug metabolising enzyme; gene; drug metabolism; chromosome 22; polymorphic site; drug evaluation; drug screening; genotyping; genetic profiling; therapeutic customisation; adverse reaction; polymorphism; SNP; ds. clinical trial; drug approval; single nucleotide polymorphism; SNP; ds.
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02-MAY-2001; 2001JP-00135256
27-AUG-2001; 2001JP-00256862
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Query Match Best Local Similarity

1.5%; 11 Ç

Score Pred.

14.6; DB 1; No. 2.2e+03; DB 1; 0 Other

Length 41;

Sequence

41 BP;

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RESULT 2148
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                                          The invention relates to an isolated nucleic acid (1) derived from a human gene encoding a protein, such as the C1, S subcomponent protein (C1S), the alanyl aminopeptidase protein (ANPED), the meprin A, beta protein (MREP1B), the aminopeptidase P-like protein (XPN-PBPL), the tissue kallikrein protein (KLK1), the membrane bound aminopeptidase P protein (XPN-PBP2), or the soluble guanylate cyclase 1, alpha-2 subunit protein (XPN-PBP2). The nucleic acid comprises at least one polymorphic position, including the alleles, reference alleles and alternate alleles of the single nucleotide polymorphisms, listed in the specification. The
                                                                                                                                                                                                                              New nucleic acid comprising a single nucleotide polymorphism at a specific location, useful in paternity testing, genetic analysis diagnosing, preventing or treating cardiovascular diseases e.g. angioedema or angina pectoris.
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C1 S subcomponent protein; C1S; alanyl amir
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polymorphic position resides in a (non)coding position within the genomic sequence of the gene. The polymorphic position residing in a coding position results in a missense or silent mutation of the translated
                                                                                                                                                                                                   Claim
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RAMANATHAN C S.
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                                                                                                                                                                                                   SEQ ID
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                                                                                                                                                                                                   60;
                                                                                                                                                                                                                                                                                                                                                           Perrone
                                                                                                                                                                                                 376pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polymorphism
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                                                                                                                                                                                                                                                                                                                                                           Σ
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                                                                                                                                                                                                                                                                                                                                                           Powell JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aminopeptidase protein; ANPEP;
P-like protein; XPN-PEPL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP;
                                                                                                                                                                                                                                                                                                                                                             Ramanathan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9;
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                                                                                                                                                                                                                                                                                                                                                             cs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       heart failure;
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                                                                                                                                                                                                                                                                                                                                                             Swanson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    haplotype;
                                                                                                                                                                                                                                                                             מם
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CC product of the gene. The polymorphic position residing in a non-coding CC position resides within the untranslated region or an intronic region of the gene. Constructing haplotypes using the nucleic acids above further CC comprises using the haplotypes to identify an individual for the presence of a disease phenotype, and correlating the presence of the disease (CC phenotype with the haplotype. The disease phenotype is angioedema or an CC angioedema-like disorder. The nucleic acids, primers and probes are CC useful in phenotype correlations, paternity testing, medicine and genetic CC analysis. The nucleic acids and polypeptides can be used in diagnosing, CC preventing or treating cardiovascular diseases, e.g. angioedema, angina CC pectoris, hypertension, heart failure, myocardial infarction, aneurysm, CC arteriosclerosis, thrombosis, coronary artery disease or sepsis, inflammatory diseases, inflammatory arthritis, asthma, chronic cobstructive pulmonary diseases, inflammatory arthritis, asthma, chronic constructive pulmonary diseases, inflammatory arthritis, asthma, chronic constructive pulmonary diseases, cough reflex, allergies, or cancer. The present sequence represents a human single nucleotide polymorphism (SNP)
PIT TO THE PROPERTY OF THE PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2149
ADL64136
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; human; single nucleotide polymorphism; SNP;
C1 S subcomponent protein; C1S; alanyl aminopeptidase protein; ANPEP;
meprin A beta protein; aminopeptidase P -like protein; XPN-PEPL;
tissue kallikrein protein; KLK1; aminopeptidase P protein; MEPIB;
soluble guanylate cyclase 1 alpha-2 subunit protein; GUCY1A2; haploty;
angioedema; angioedema-like disorder; paternity testing;
cardiovascular diseases; angina pectoris; hypertension; heart failure,
myocardial infarction; aneurysm; stroke; embolism; thrombosis;
coronary artery disease; arteriosclerosis; hypersensitivity;
haemodialysis; sepsis; inflammatory disease; inflammatory artlarry.
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                                                                                                                                                                                                                 (HUIL/)
(PERR/)
(POWE/)
                                                                                                                                                                                                                                                                                                                                                                          03-JUN-2002; 2002US-0384980P
                                                                                                                                                                                                                                                                                                                                                                                                                                     03-JUN-2003; 2003US-00453827
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human single nucleotide polymorphism (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL64136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004033582-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                            (EDMO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388 CAAAGTGCTGGGATTACAGGCGTGCAGCCGTGCCTGG 424
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                                                                                                                     POWELL J R.
RAMANATHAN C
SWANSON B.
TSUCHIHASHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                           ZERBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chronic obstructive pulmonary
                                                                                                                                                                                                                                                 PERRONE M.
                                                                                                                                                                                                                                                                                                            EDMONDS M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTGAGCTGAGATCGCACCACTGCACTCCAGCCTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                              <u>~</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cough reflex; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GUCY1A2; haplotype;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              heart failure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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Edmonds M, Tsuchihashi

Hui L, Perr Z, Zerba K;

Perrone

Z,

Powell

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Ramanathan

S)

Swanson

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RESULT 2150
AAI76192
ID AAI7619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC protein (MEPIB), the aminopeptidase P-like protein (XPN-PEPI), the tissue CC kallikrein protein (KLK1), the membrane bound aminopeptidase P protein CC (XPNPEP2), or the soluble guanylate cyclase 1, alpha-2 subunit protein CC (XPNPEP2). The nucleic acid comprises at least one polymorphic position. CC including the alleles, reference alleles and alternate alleles of the cc single nucleotide polymorphisms, listed in the specification. The CC single nucleotide polymorphisms, listed in the specification within the genomic CC sequence of the gene. The polymorphic position residing in a coding cooling position resides within the untranslated region of the translated CC product of the gene. The polymorphic position residing in a non-coding constition resides within the untranslated region of an intronic region of the gene. Constructing haplotypes using the nucleic acids above further CC comprises using the haplotypes to identify an individual for the presence of a disease phenotype, and correlating the presence of the disease phenotype with the haplotypes to identify an individual for the presence co f angioedema-like disorder. The nucleic acids, primers and probes are cc useful in phenotype correlations, paternity testing, medicine and genetic analysis. The mucleic acids and polypeptides can be used in diagnosing, cc preventing or treating cardiovascular diseases, e.g. angioedema angina could prove the could be acids and polypering the presence or arteriosclerosis, hypersensitivity reactions during haemodialysis. Constructive pulmonary disease, inflammatory arthritis, asthma, chronic constructive pulmonary disease, and protective pulmonary disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid comprising a single nucleotide polymorphism at a specific location, useful in paternity testing, genetic analysis or diagnosing, preventing or treating cardiovascular diseases e.g. angioedema or angina pectoris.
                                                                                                                                                                                             Human; single nucleotide polymorphism; SNP; genome; gene therapy; protein therapy; vaccine; probe; diagnostic assay; detection; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-180052/17.
                     30-NOV-2000; 2000WO-US032758.
                                                                                                                                                                                                                                                                                         Human silent SNP containing nucleic acid SEQ:3133.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41 BP; 9 A; 13 C; 11 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present sequence represents a human single nucleotide polymorphism of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; SEQ ID NO 59; 376pp; English.
                                                                  07-JUN-2001
                                                                                                            WO200140521-A2
                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                         09-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAI76192 standard; DNA; 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                numan gene encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an isolated nucleic acid (I) derived from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (C1S),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388 CAAAGTGCTGGGATTACAGGCGTGCAGCCGTGCCTGG 424
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                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ng a protein, such as the Cl, S subcomponent protein aminopeptidase protein (ANPEP), the meprin A, beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.6; DB 1;
Pred. No. 2.2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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RESULT 2151
AAH89507/c
ID AAH8950
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53124 to AAM53229 represent peptides related to human polymorphic polymucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of polymorphic polypeptides. For example, (I) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           by expressing inactive proteins or to supplement the patients own production of polypeptide. Additionally, (I) and its complementary sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. The polypeptides encoded by (I) may be used as antigens in the production of antibodies specific for polymorphic polypeptides. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA173060 to AA179867 represent isolated human polymorphic polynucleotide sequences (I), which contain single nucleotide polymorphisms (SNPs).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-NOV-1999; 99US-0168138P.
29-NOV-2000; 2000US-00726173.
                                                                                                                                                                                                                                                                Human; single nucleotide polymorphism; SNP; paternity test; forensic test; aberrant protein expression; ds.
                                                                                                                                                                                                                                                                                                              Human coding sequence polymorphic site SEQ ID NO: 288
                                                                                                                                                                                                                                                                                                                                                 01-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                 AAH89507;
                                                                                                                                                                                                                                                                                                                                                                                                                  AAH89507 standard; DNA; 51 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 51 BP; 14 A; 16 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptides in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 1009; 2653pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polymorphic nucleic acid sequences, useful in genetic testing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-356160/37
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                                                                                            07-JAN-2000; 2000US-0174962P
                                                                                                                                                                                              WO200151670-A2
                                                                                                                             05-JAN-2001; 2001WO-US000322
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                                                               (CURA-) CURAGEN CORP.
                                                                                                                                                              .9-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260 AAGTGCTAGATACAGGACTGGCCACCATG 288
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                              protein expression;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 2.16
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.6;
Pred. No. 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51;
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For

WPI; 2001-451871/48.

Shimkets RA,

Leach MD

P-PSDB; AAM00390

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RESULT 2152
AA176193
ID AA17619
XX AA17619
AC AA17619
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XX Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to human nucleic acids containing nucleotide polymorphisms (SNPs). These can be used in forensic \epsilon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-NOV-2001
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AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide sequences (I), which contain single nucleotide polymorphisms (SNPs). AAM53114 to AAM53329 represent peptides related to munan polymorphic polynucleotide sequences. The sequences can be used in gene and protein therapy, and in vaccine production. (I) and the polypeptides encoded by them may be used in the prevention, diagnosis and treatment of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; single nucleotide polymorphism; SNP; genome; protein therapy; vaccine; probe; diagnostic assay; quantitation; restorative therapy; polymorphic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-NOV-1999;
29-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                          Claim 1;
                                                                                                                                                                                                                                                                                                                   Polymorphic nucleic acid sequences, useful in
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-356160/37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTGCTAGATACAGGACTGGCCACCATG 288
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 186; 475pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51 BP; 11 A; 13 C; 15 G; 12 T; 0 U; 0 Other;
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ilarity 69.0%;
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2000US-00726173.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Leach M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 containing nucleic
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Pred. No. 2.1e+0
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                                                                                                                                                                                                                                                                                                                      genetic testing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        associated with inappropriate expression of polymorphic polypeptides. For example, (I) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides by expressing inactive proteins or to supplement the patients own production of polypeptide. Additionally, (I) and its complementary sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. The polypeptides encoded by (I) may be used as antigens in the production of antibodies specific for polymorphic polypeptides. The antibodies may also be used to down regulate expression and activity. The antibodies may also be used as diagnostic agents for detecting the presence of polymorphic polyperides.
Sequence 16
                            genetic characterisation, of acquired disease allel
                                       AAQ95282 and AAQ95283 are a primer pair for the PCR amplification of the simple tandem repeat (STR) corresponding to wg2g4. The STR can be used for treatment and diagnosis in human and veterinary medicine, partic. I genetic characterisation, mapping, linkage studies and analysis/diagnosis for the statement and diagnosis of the statement and diagnosis.
                                                                                                                                           Identifying simple tandem repeat loci in DNA - by screening DNA library to enrich for fragments contg. the repeats before cloning and rescreening, also simple tandem repeats for treatment or diagnosis.
                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                            21-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                  W09517522-A2
                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer WG2G4B; wg2g4; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Simple tandem repeat
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                                                                                                                   Claim
                                                                                                                                                                                                                                     Jeffreys AJ,
                                                                                                                                                                                                                                                                                                                        21-DEC-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                Page 39; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 13 A; 16 C;
                            disease alleles
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         mapping;
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linkage studies; analysis; alleles;
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Pred. No. 2
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      0 Other
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                                               dicine, partic. for analysis/diagnosis
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Score 14.4; DB 1; Pred. No. 1.7e+03;

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                                                                  Query Match
Best Local S
Matches 15
                                                                                                                                                                    gene comprises the template. Gene structure can be determined without the need to sequence the entire gene. The method provides information necessary to determine gene structure and phenotypic expression without the need to sequence entire chromosomal copy of the gene or fragment. The methods are useful in germline sequence variation analysis. The method is also useful for determining the boundaries between regions of nucleic acids that were separated by intervening sequence, and also for determining boundaries present in genes containing group I type introns such as Tetrahymena rRNA, where self-splicing occurs in the presence of guanosine cofactor. The present sequence is a primer used for sequencing human CYP450 2C19 cDNA related to the invention
                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a method for determining gene structure when the genomic sequence is unknown. The method involves sequencing the gene across exon-intron boundaries using evenly spaced primers or tiled primers comprises nucleic acids that hybridise to the known cDNA sequence of the gene at about 100-300 base intervals and the comprises of comprises to the comprise of the gene at about 100-300 base intervals and the comprises.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining structure of genes whose sequence is not known from cDNA, sequencing the gene or gene across exon-intron boundaries using evenly spaced primers comprising nucleic acids that hybridize to the cDNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; gene structure; phenotypic expression; guanosine cofactor; germline variation analysis; exon-intron boundary; Tetrahymena rRNA; cytochrome P450 2C19; CYP450 2C19; primer; ss.
                                                                                                                                        Sequence 16 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human CYP450 2C19 cDNA upper strand sequencing primer 1064U
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example
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                                 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              837
                                                                  al Similarity
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Page 27; 81pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCTGCCTGCCTCGG
                         ATCTCTGGACCTTGTG 837
ATCTCTGGACCTCGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fitzgerald MS;
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                        5 A;
                                                                               1.5%;
                                                                                                                                        4 C; 5 G; 2 T; 0 U; 0 Other;
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                                                                  0,
                                                                                  Score 14.4; DB 1;
Pred. No. 1.7e+03;
                                                                                                   DB 1;
                                                                                                 Length 16;
                                                                  Indels
                                                                  0,
                                                                  Gaps
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RESULT 2155 ADD28838/c ID ADD28838 standard; DNA; 16

밁 Ś

16

428 TTTTATTTTATTTTTT 443

Matches

<u>.</u>

Mismatches

Indels

0

Gaps

0;

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The present invention describes a molecular sub-typing system (S) for CC Escherichia coli, which comprises observing and recording variable number CC tandem repeats (VNTR) repeat arrays in an E. coli DNA sample. Also CC described: (I) VNTR loci (I) for sub-typing E. coli O.57:H7; (2) primers CC (II) for amplifying (I); (3) amplicon comprising (I) and a locus comprising a VNTR sequence from E. coli O.57:H7; (4) multiplex cocktails CC (III) for multiplex amplification of (I) comprising (II) and a locus cof (II); (5) kits for molecular sub-typing of E. coli O.57:H7 by PCR CC maintaining hybridisation and amplification condition in a PCR instrument CC with DNA from an E. coli strain; (6) kits for molecular sub-typing of E. coli O.57:H7 by PCR CC maintaining hybridisation and amplification condition in a PCR instrument with DNA from an E. coli o.57:H7 strain; and (7) sub creates for maintaining hybridisation and amplification condition in a coli o.57:H7 strain; (b) obtaining sing: (a) obtaining one or more conservable indicator; (b) obtaining single-stranded sample DNA from the C. coli sample to be subtyped; (c) combining the primers and the VNTR; (d) separated ampliforns; and (f) comparising the primers and the VNTR; (d) separated ampliforns; and (f) comparing the primers and the VNTR; (d) separated ampliforns; and (f) comparing the primers and staces of comprisions obtained by PCR from a known E. coli strain. M1 is useful for coli. The present sequence represents an E. coli VNTR loci related coli. In the present sequence represents an E. coli VNTR loci related convertion.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               molecular sub-typing system; Escherichia coli; variable number tandem repeat; VNTR; genetic data;
                                                                         Sequence 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 7; SEQ ID NO 457; 166pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Molecular sub-typing system for Escherichia coli, comprises observing recording variable number tandem repeat arrays in an Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYÀR-) UNIV ARIZONA.
(KEIM/) KEIM P.
(KEYS/) KEYS C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-DEC-2002; 2002WO-US039914.
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Local Sin
Similarity 93.8
15; Conservative
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                                                                         BP; 13
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                                                                         A; 0 C; 0 G; 3 T; 0 U; 0 Other;
               93.8%;
                     Pred. No.
                                    Score 14.4;
                   1.7e+03
                                      DB 1;
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RESULT 2156

0

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The present invention describes a molecular sub-typing system (S) for CC Escherichia coli, which comprises observing and recording variable number trandem repeats (NWTR) repeat arrays in an E. coli DNA sample. Also CC described: (I) WYTR loci (I) for sub-typing E. coli DNA sample. Also CC (II) for amplifying (I); (3) amplicon comprising (II) and a locus CC (III) for amplifying (I); (3) amplicon comprising (II) and a locus CC (III) for multiplex amplification of (I) comprising two or more primers CC (III); (5) kits for molecular sub-typing of E. coli O157:H7 by PCR CC comprising primers for WNTR loci in E. coli, and amplifying reagents for CC (III); (5) kits for wolecular sub-typing of E. coli O157:H7 by PCR CC (III); (5) kits for molecular sub-typing of E. (C) coli O157:H7 strains by multiplex, comprising (III), and amplifying reagents for maintaining hybridisation and amplification condition in a CC multiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub CC (III); (A) maintaining hybridisation and amplification condition in a cobservable indicator; (b) obtaining single-stranded sample DNA from the CC (III); (B) and amplifying cone or more CC (III); (B) comparising (III); (B) the sample DNA from the CC (III); (B) comparising the primers have an PCR instrument to form amplicons comprising the primers and the VNTR; (d) separated amplicons; and (f) comparing the evaluation to an evaluation of amplicons obtained by PCR from a known E. coli strain. M1 is useful for coli. The present sequence represents an E. coli VNTR loci related coli. In the present sequence represents an E. coli VNTR loci related coli. In the present sequence represents an E. coli vNTR loci related coli. In the present sequence represents an E. coli VNTR loci related coli. In the present coli. (II) is useful for subtyping pathogenic E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecular sub-typing system for Escherichia coli, comprises observing and recording variable number tandem repeat arrays in an Escherichia coli DNA
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                                                          Sequence
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) KEIM P.
) KEYS C.
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                                                          16
                                                          BP;
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                                                          ð
1.5%;
                                                          0 C; 0 G;
  Score 14.4;
Pred. No. 1
                                                          13 T; 0 U; 0 Other;
  4; DB 1;
1.7e+03;
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                    Length 16;
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Best Local Similarity

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RESULT 2157
ADD28836/c
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        CC Escherichia coli, which comprises observing and recording variable number CC tandem repeats (NNTR) repeat arrays in an E. coli DNA sample. Also Cd described: (1) VNTR loci [1] for sub-typing E. coli O157:H7; (2) primers CC (III) for amplifying (1); (3) amplicon comprising (II) and a locus CC (III) for amplifying (1); (3) amplicon comprising (II) and a locus CC (III) for multiplex amplification of (1) comprising two or more primers CC (III); (5) kits for molecular sub-typing of E. coli O157:H7 by PCR CC (III); (6) kits for wolecular sub-typing of E. coli O157:H7 by PCR CC (III); (7) kits for molecular sub-typing of E. coli O157:H7 by PCR CC (III); (8) kits for molecular sub-typing of E. (1) comprising trimers for maintaining hybridisation condition in a PCR instrument CC with DNA from an E. coli strain; (6) kits for molecular sub-typing of E. (1) O157:H7 strains by multiplex, comprising (III), and amplifying creagents for maintaining hybridisation and amplifying one or more creating the instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub cultiplex instrument by brain; comprising the primers have an conservable indicator; (b) obtaining single-stranded sample DNA from the coli sample to be subtyped; (c) combining the primers, the sample DNA from the coli sample DNA from the primers and the VNTR; (d) separated amplicons and (f) comparing the evaluation to an evaluation of amplicons by size; (e) evaluating numbers and the VNTR; (d) separated amplicons; and (f) comparing the evaluation to an evaluation of instrument of the present subtyping pathogenic E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Molecular sub-typing system for Escherichia coli, comprises observing recording variable number tandem repeat arrays in an Escherichia coli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 7; SEQ ID NO 455; 166pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sample.
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RESULT 2158
ADD28837
ADD28833
XX
ADD28833
XX
ADD28833
XX
ADD2883
XX
MOlecu
KW MOlecu
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XX
ADD2883
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ADD2883
AC (UXA
PR 11-D
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Best Local Similarity
typing (M1) an E. coli strain, comprising: (a) obtaining one or more primers for amplifying loci comprising: (a) obtaining one or more observable indicator; (b) obtaining single-stranded sample DNA from the E. coli sample to be subtyped; (c) combining the primers, the sample DNA and amplifying reagents under hybridising and amplifying conditions in a PCR instrument to form amplicons comprising the primers and the VNTR; (d) separated amplicons; and (f) comparing the evaluation to an evaluation of amplicons obtained by PCR from a known E. coli strain. M1 is useful for
                                                                                                                                                                                                                     Sequence 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) UNIV ARIZONA.
() KEIM P.
() KEYS C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
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Pred. No. 1.7e+03;
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            cc least 20 but not more than 1500 consecutive nucleotides of the optineurin cc promoter appearing as ADB13890. Also included are the optineurin promoter comperably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin cc promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or promoter operably linked to a cheared from a cell or bodily fluid (comprising detecting a polymorphism cc in a promoter region of the optineurin gene, associated with a glaucoma compensation of a sample containing DNA, detecting a SNP sequence variation in a sample containing DNA, determining the presence of an optineurin promoter sequence variation in a sample containing DNA, determining the presence or increased consceptibility to glaucoma or to a progressive ocular hypertensive conscription of glaucoma or to a progressive ocular hypertensive consplication reaction primers that direct amplification of a selected complification of a selected compl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; optineurin; ds; ophthalmological; single nucleotide polymorphism; SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     producing discrete genetic data for an epidemiological database. () useful as a research tool. (S) is useful for subtyping pathogenic lool. The present sequence represents an E. coli WNR loot related amplicon sequence which is used in the exemplification of the presu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and relate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 11; SEQ ID NO 319; 159pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-864168/80.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Raymond V,
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                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid (N1) comprising at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MORI/)
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RAYMOND V
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Pred. No. 1.
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nucleic acid region containing the variation within

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XX ADE1401
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                             The invention relates to an isolated nucleic acid (NI) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism obtained from a cell or bodily fluid (comprising detecting a polymorphism in a promoter region of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing DNA, detecting DNA, determining the presence or increased susceptibility to glaucoma or to a progressive ocular hypertensive disorder resulting in loss of visual field in a patient (or the severity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       promoter and amplifying the DNA) and detecting a polymorphism (co obtaining a sample containing human genomic DNA, providing a nucl capable of detecting a SNP located within an optineurin promoter,
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15; Conserv
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RAYMOND V.
MORISSETTE J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ucoma; progressive ocular hypertensive disorder; related disorder; motif; repeat element; regula
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Pred. No. 1
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1.7e+03;
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or progression of glaucoma

in a patient,

comprising

providing

Query Match Best Local S Matches 15

Similarity

Conservative

0

1.5%;

Score 14.4; D Pred. No. 1.7e 0; Mismatches

.7e+03

DB 1;

Length 16;

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RESULT 2161
AAD63061/c
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amplification reaction primers that direct amplification of a select nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (compobtaining a sample containing human genomic DNA, providing a nuclei capable of detecting a SNP located within an optineurin promoter, a detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 16
                        The present invention discloses a method for generating five prime biase invaled tag libraries of cDNAs. The step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags. The present sequence is human NADH dehydrogenase (ubiquinone) Fe-S protein 8 (NADH-coenzyme Q reductase; NDUFS8) tandem tag DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         putative regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present sequence is an optineurin promoter motif, repeat element
Sequence 16
                                                                                                                                                  sample of mRNAs, amplif amplified tags to form
                                                                                                                                                     Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NADH dehydrogenase Fe-S protein 8 (NDUFS8) tandem
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                                                                                                                Disclosure; Page 4; Opp;
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                                                                                                                                                                                                                                                                                                               (SAMA/)
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HOPPA N L.
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RESULT 2162
AD63093/c
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RESULT 2163
AAD63047/c
ID AAD6304
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the
                         Tandem tag;
                                                                 Human ribosomal protein S21 (RPS21) tandem
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 5 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention discloses a method for generating five prime biased tandem tag libraries of cDNAs. The step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags.
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                                                                                                                                                                                         standard;
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                                                                                                                                                                                                                                                                                            TTTTAGTAGAGACGGG 1
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                       concatenated tag; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence is human tandem tag DNA
                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Pred. No. 1.7e
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 1 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention discloses a method for generating five prime bias tandem tag libraries of cDNAs. The step involves isolating a sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the concatenated tags.
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                                                                                                                                     09-OCT-2003.
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                                  (HERM/)
                                                        (SAMA/)
                                                                                         06-MAR-2002; 2002US-00092885
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                                                                                                                                                                                  Homo sapiens
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                       (JOHE/)
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HOPPA N L.
JOHE K K.
                     HERMIDA L C. HOPPA N L. JOHE K K.
                                                        SAMAL B.
LI Y.
                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                             1.5%;
                                                                                                                                                                                                                              #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   is human ribosomal protein tandem
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                                                                                                                                                                                                                                                                                                ВP
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                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.4;
Pred. No. 1.
Hoppa NL,
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                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                        Length 16;
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                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Hermida LC,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention discloses a method for generating five printrandem tag libraries of cDNAs. The step involves isolating a samp mRNAs, amplifying the released tags, concatenating the amplified form concatenated tags, amplifying and isolating the concatenated tags, amplifying and isolating the concatenated The present sequence is human tandem tag DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Generating five prime biased tandem tag libraries of cDNAs by isolating sample of mRNAs, amplifying the released tags, concatenating the amplified tags to form concatenated tags, amplifying and isolating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
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for determining target genomic nucleic acid of a sample. The method comprises contacting the sample with the mixture of probes (preferably comprising 5-50 probes), contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one
                                                                                                                                                                                                                                                                                                                                                                                                                                             03-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Non-nucleotide probe of the invention #15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH59611;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-831617/77
                                                                          useful for suppressing the binding of one or more detectable nucleic ac probes, that are greater than 100 base pairs and that have been derived from genomic nucleic acid, to one or more undesired sequences in an ass
                                                                                                                                                                                                      Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic
                                                                                                                                                                                                                                                                    WPI; 2003-421160/39.
                                                                                                                                                                                                                                                                                                                                                                              24-SEP-2001; 2001US-0324499P
                                                                                                                                                                                                                                                                                                                                                                                                            24-SEP-2002; 2002WO-US030573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003027328-A2
                                                                                                                                                        Claim 10; SEQ ID NO 17; 103pp; English.
                                                                                                                                                                                                                                                                                                   Kirtsen
                                                                                                                           The present sequence represents a non-nucleotide probe. The probe is
                                                                                                                                                                                                    nomologous
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15; Conserv
                                                                                                                                                                                                                                                                                                                                BOSTON PROBES INC. DAKOCYTOMATION DENMARK
                                                                                                                                                                                                                                                                                                 Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 5; Opp; English.
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                                                                                                                                                                                                                                                                                               Hyldig-Nielsen JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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homologous acid.

WPI;

2003-421160/39

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Hyldig-Nielsen

Į,

Williams

BF

Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic

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cc the sample. The genomic nucleic acid is contained in a fixed tissue or a ccell, and the sample is metaphase spreads, interphase nucleic or nucleic cell, and the sample is metaphase spreads, interphase nucleic or nucleic contained in paraffin embedded tissue material or frozen tissue sections. The cc found in paraffin embedded tissue material or frozen tissue sections. The cc probe is also useful in comparing a sample of genomic nucleic acid with the metaphase treating a sample of genomic nucleic acid and control genomic nucleic acid, which are differentially labelled, the cc array or both the sample and control genomic nucleic acid and the array control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array or both the sample and control genomic nucleic acid and the array or both the signals from the differential labels of the array to intensities of the signals from the differential labels of the array to that caused by hybridization of the probes to genomic nucleic acid, thus cetaphe as compared with the relative copy numbers of sequences in the carray is determined using an intercalating dye or a detecrable antibody, or its fragment, that is specific for a nucleic acid/nucleic acid hybrid. The sample of genomic nucleic acid to be tested and the reference of of the genomic array is determined by determining the reference of anticleic acid are labelled with detectable moiety such that hybridization and antical antipolar array is determined by determining the reference and respective and antical and the reference.
RESULT 2166
ADH59599/c
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of the genomic array is determined by determining the presence, absence amount or location of the detectable label on the one or more genomic arrays. The genomic array comprises nucleic acid that is prepared from Bacterial Artificial Chromosome (BAC) clones. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16
                                                                                                                                                                                                                                         24-SEP-2001; 2001US-0324499P
                                                                                                                                                                                                                                                                                 24-SEP-2002; 2002WO-US030573
                                                                                                                                                                                                                                                                                                                      03-APR-2003
                                                                                                                                                                                                                                                                                                                                                           WO2003027328-A2
                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Non-nucleotide probe of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH59599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH59599 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                          non-nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843 CCTGCCTCGGCCTCCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15;
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                                                                                                                                                                                        DAKOCYTOMATION DENMARK
                                                                                                                                                                                                        BOSTON PROBES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a non-nucleotide probe of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        probe; Bacterial Artificial Chromosome clone;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 C; 3 G; 2 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93.8%;
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
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Claim 10; SEQ ID

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5; 103pp; English

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ABX14989/c
ID ABX149
XX ABX149
AC ABX149
XX II 4-MAR
XX Human;
KW Human;
KW energy
XX Homo s
XX WO2002
XX HOTO s
PN WO2002
XX PN WO2002
XX PF 13-MAY
XX II-MAY
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 array or both the sample and control genomic nucleic acid and, the array with the mixture of the probe under suitable hybridization conditions, contacting the array with treated mixture of sample and control genomic nucleic acid under suitable hybridization conditions, and comparing the intensities of the signals from the differential labels of the array to that caused by hybridization of the probes to genomic nucleic acid, thus determining one or more variations in copy numbers of sequences in the campared with the relative copy numbers of sequences in the genomic carray is determined using an intercalating dye or a detectable antibody, or its fragment, that is specific for a nucleic acid/nucleic acid hybrid. The sample of genomic nucleic acid to be tested and the reference of nucleic acid are labelled with detectable moisty such that hybridization of the genomic array is determined by determining the presence, absence, amount or location of the detectable label on the one or more genomic arrays. The genomic array comprises nucleic acid that is prepared from Bacterial Archificial Chromosome (BAC) clones. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell, and the sample is metaphase spreads, interphase nucleic or nucleic found in paraffin embedded tissue material or frozen tissue sections. The probe is also useful in comparing a sample of genomic nucleic acid with that of a control sample using a genomic nucleic acid reference array. The method comprises treating a sample of genomic nucleic acid and control genomic nucleic acid, which are differentially labelled, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for determining target genomic nucleic acid of a sample. The method comprises contacting the sample with the mixture of probes (preferably comprising 5-50 probes), contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid of the sample by determining the hybridization of the one or more detectable nucleic acid probes to the target genomic nucleic acid of the sample. The genomic nucleic acid is contained in a fixed tissue or a
                              11-MAY-2001; 2001US-0290016P
                                                                                                                             21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                  Human delta opioid receptor OPRD1-1 SNP genotyping PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX14989 standard; DNA; 16 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probes, that
                                                                        13-MAY-2002; 2002WO-US014940
                                                                                                                                                                           WO200292838-A2
                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                        energy homeostasis disorder; chromosome 1.
                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                     14-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    represents a non-nucleotide probe of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843 CCTGCCTCGGCCTCCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                              delta opioid receptor; OPRD1-1; ss; PCR; primer; nucleotide polymorphism; eating disorder; anorex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCGCCTCGGCCTCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 2 A; 3 C; 11 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
93.8%;
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                                                                                                                                                                                                                                                                                                                     SNP;
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맑 Ś

Matches

15;

Conservative

<u>,</u>

871 16

TTACAGGCGTGAGCCA 886

Query Match Best Local Similarity

1.5%; 93.8%;

Score 14.4; Pred. No. 1. Mismatches

1.7e+03

1;

<u>,</u>

Gaps :

0

DB 1;

Length 16; Indels

RESULT 2168

ABT34281/c
ID ABT342
XX
AC ABT342
XX
DT 12-UUN
XX
Opioid
XX
Eating
KW Eating
KW Earting
KW anorex
XX
Uniden
XX
Uniden
XX
Uniden
XX
IN U

Unidentified

WO2003012143-A1

Eating disorder; polymorphism; dataset; allele; HGBASE identific serotonin receptor 1D; delta-opioid receptor; dopamine receptor anorexia nervosa; bulimia nervosa; PCR; primer; ss.

Opioid receptor D1 PCR primer SEQ ID No

67.

identification;

12-JUN-2003 (first entry)

ABT34281;

ABT34281 standard; DNA; 16

16-JUL-2001; 20-JUL-2001; 13-NOV-2001; 19-DEC-2001;

; 2001US-0305153P. ; 2001US-0306440P. ; 2001US-0331285P. ; 2001US-0340843P.

16-JUL-2002; 2002WO-US022555

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CC encoded by the nucleic acid, an isolated antibody that specifically
CC recognises the delta opioid receptor variant, a vector comprising the
CC nucleic acid, a host cell transformed to contain the vector, producing
CC mucleic acid, a host cell transformed to contain the vector, producing
CC modulates the expression of the nucleic acid, diagnosing a genetic
CC predisposition to an eating or energy homeostasis disorder by detecting
CC the presence or absence of the variant nucleic acid in a patient sample,
CC an allele specific primer that detects a polymorphism in the gene
CC encoding a delta opioid receptor associated with an eating or energy
CC contain the variant nucleic acids. The variants are named Oppol-1 to
CC contain the variant nucleic acids. The variants are named Oppol-1 to
CC contain the variant opioid receptor gene is located on chromosome 1. The
CC diagnosing a genetic predisposition to an eating or energy homeostasis
CC diagnosing a genetic predisposition to an eating or energy homeostasis
CC disorder, such as anorexia nervosa. The allele specific primer is useful
CC associated with the disorder cited. The present sequence is a genotyping
CC pre primer for detection the present of a particular suc (sincle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid molecule encoding a delta opioid receptor variant associated with an eating or energy homeostasis disorder. Also included are a delta opioid receptor variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid molecule encoding a delta opioid receptor variant associated with an eating or energy homeostasis disorder, useful for diagnosing a genetic predisposition to such disorder, e.g. anorexia
Sequence 16 BP; 4 A;
                                               associated with the disorder cited. The pre
PCR primer for detecting the presence of a
nucleotide polymorphism) in a sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nervosa.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 19; 39pp; English
5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                              particular SNP
                                                                                (single
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ADH70278/c
ID ADH702
XX
AC ADH702
AC ADH7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel isolated nucleic acid molecule comprising a variant gene associated with an eating disorder and selected from any of 119 polymorphisms with their corresponding genotyping in dataset, alleles and HGBASE identification, given in the specification. The novel nucleic acid molecule has polymorphisms in the serotonin receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is useful in diagnostic and prognostic assays for eating disorders, in particular anorexia nervosa and bulimia nervosa. This polymiclectide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid molecule having polymorphisms in the serotonin receptor 1D, delta-opioid receptor, or dopamine receptor D2, useful in diagnostic and prognostic assays for eating disorders, such as anorexia and bulimia
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; algebrarative nervous system disease; misease; type I hypersensitivity disease; type I hypersensitivity; Goodpasture's syndrome; allergy; type II hypersensitivity; leprosy; infectious disease; viral infection; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; parasitic infection; schstessome; filaria; bacterial infection; Mycobacterium; neoplastic disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-DEC-2001; 2001US-0340844P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH70278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence represents a opioid receptor 1D PCR primer of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bergen
                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Vbeta gene repeat sequence #68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH70278 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PRIC-) PRICE FOUND LTD
                                                                                                                     19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                  US2002150891-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human;
                                                                                                                                                                                                               05-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2003-268122/26
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                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T-cell associated disease; Vbeta; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conserv
                              HOOD L E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTACAGGCGTGAGCCA 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTACAGGTGTGAGCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 60; 149pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yeager M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
llarity 93.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                        95US-00531241
                                                                                                                                                    94US-00309335.
                                                                                                                                                                                                               99US-00263959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.4; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, vbetaRNA or cDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases including autoimmune diseases, degenerative nervous system diseases, graft versus host disease, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addison's diseases atrophic gastritis. Degenerative nervous system diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with altergens that lead to
                                                                                        allergies. Type II hypersensitivities such as those present in allergies. Type II hypersensitivities such as those goodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by the yeast genus Candida, parasitic infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative diseases such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-059052/06
Sequence 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hood LE, Rowen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a kit
     BP; 13 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 472; 164pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for diagnosing and treating T-cell rises a panel of nucleic acid prime
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Matches
                                       Query Match
Best Local
                430
16
                                15;
                                       Similarity
TTATTTTATTTATTT
                                 Conservative
                                       1.5%;
93.8%;
                 445
ب
                                <u>,</u>
                                        Score 14.4; DB 1;
Pred. No. 1.7e+03;
                                 Mismatches
                                 1; Indels
                                                Length
                                                  16;
                                 0,
                                 Gaps
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RESULT 2170
ADQ30362
                                                                                                                                                            hypalgesia; hyperalgesia; neuralgia;
                                                                                                                                                                     pain transmission; primary sensory neuron; transcription facto detection; MZF1; NFkappaB; NFAT; GATA1; sensitivity disorder;
                                                                                                                                                                                           ds; VR1 receptor; vanilloid receptor type 1; modulator;
                                                                                                                                                                                                                Human VR1 exon 1d transcription factor binding fragment
                                                                                                                                                                                                                                     09-SEP-2004
                                                                                                                                                                                                                                                                            ADQ30362 standard; DNA;
                                                           09-DEC-2002; 2002DE-01057421
                                                                               01-DEC-2003; 2003WO-EP013522
                                                                                                                      WO2004053120-A2
                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                         ADQ30362;
                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                             16
                                                                                                                                                               myalgia;
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factor;

analgesia;

WPI; 2004-468868/44

Weihe

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Bieller A,

Schaefer MKH;

(CHEF)

GRUENENTHAL

GMBH

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid that modulates expression of the vanilloid receptor-1, useful for control of pain or sensitivity disorders, comprises sequence from control regions of the receptor gene.
                                                                                                                                                                                                                                                                                                                         primer; polymerase chain reaction; PCR; linkage study; locus;
microsatellite marker sequence; automated genotyping; allele;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 4 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 53; 68pp; German.
WPI; 1995-215278/28
                                     Levitt
                                                                                                                 03-DEC-1993;
                                                                                                                                                    05-DEC-1994;
                                                                                                                                                                                          08-JUN-1995.
                                                                                                                                                                                                                                WO9515400-A1
                                                                                                                                                                                                                                                                                                       polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                  Primer A (Group 11,
                                                                                                                                                                                                                                                                                                                                                                                                                        21-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ95863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ95863 standard; DNA; 17
                                                                         AIND (OFAD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738 GACTACAGGCGCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is capable of binding to a transcription factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTACAGGTGCCCAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                           JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                       detection; Homo sapiens; ss
                                                                                                                 93US-00160837
                                                                                                                                                    94WO-US013945
                                                                                                                                                                                                                                                                                                                                                                                  set B)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                  for marker D13S217, chromosome 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 14.4; DB 1;
Pred. No. 1.7e+03;
                                                                                                                                                                                                                                                                                                                       automated genotyping; allele;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                comprises sequences
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ARASULT 2172
ARA22692
ID ARA2269
XX ARA2269
XX ID-JUN-
XX INTEGRI

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic, ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphic, simple sequence repeats and can be used in automated genotyping. esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (i.e. a difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 11 primer pairs are shown in AAQ95841-82. The published size range of the D13S217 allele is 160-174 bp, and the degree of heterozygosity in the population is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The method aims to provide a collection of highly reproducible microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kit for automated genotyping contg. pairs of PCR primers - designed amplify polymorphic nucleotide repeat sequences, arranged in sets with a characteristic fluorescence label, useful e.g. in detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; aryl hydrocarbon nuclear transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 7K-2; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Integrin subunit beta 3 substrate sequence SEQ ID NO:5918.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA22692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA22692 standard;
                                                                                                                       WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9950403-A2
                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    393 TGCTGGGATTACAGGC 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
Similarity 93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCTGGGATCACAGGC
                                                                                                                                                                                     Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 4 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                   98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                             99WO-US006507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA; 17
                                                                                                                                                                                     Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                        Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ARNT;
                                                                                                                                                                                     Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIE-2; angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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Novel ribozymes for modulating the synthesis, of an mRNA encoding an angiogenic factors.

expression and/or stability

Claim

54; Page 236; 305pp; English

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18186 to AAA19086
CC AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA21852 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA2342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA22362, AAA23343 to
CC CAA23422 represent their corresponding target sequences. The ribozymes of
CC CAA23422 represent their corresponding target sequences. The ribozymes of
CC contegrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC contegrin subunit beta 3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC engiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber
CC engiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
                                                                                                                                                                                                                                                                                                                myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                            Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA22724 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu synand other syndromes and diseases related to the levels of ARNT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Integrin subunit beta 3 substrate sequence SEQ ID NO:5950.
                                                                                                                                                                                                                                  WO9950403-A2
                                                                                                                                                                                                                                                                          Homo sapiens
                          Pavco
                                                                                                          27-MAR-1998;
                                                                                                                                                  24-MAR-1999;
                                                                (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                        PA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       subunit alpha-6, or integrin subunit beta-3
                      Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 4 A;
                                                                                                          98US-0079678P
                                                                                                                                                  99WO-US006507
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                      Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВÞ
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Pred. No. 1.8e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 T; 13 U;
                        Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 Other;
                      Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl clave gene, an integrin subunit beta 3 cc hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit beta 3 cc gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNY, and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA189187 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 and AAA19122 represent their corresponding target sequences; AAA19223 to AAA21681 and AAA21595 represent ribozyme sequences; AAA19223 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA22475 and AAA2363 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA2376 to AAA23262, AAA23341 to
                                           AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50
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Best Local
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Similarity 68.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UGCAACUUCUGCCUCC 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 A;
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Pred. No. 1.8e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
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Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;

Integrin subunit beta 3 substrate sequence

SEQ ID NO:5979.

Kippel-Trenaunay-Weber

Homo sapiens

myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss

27-MAR-1998; 24-MAR-1999; 07-OCT-1999 WO9950403-A2

98US-0079678P 99WO-US006507 片 S

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RESULT 2175
AAA22691
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NA SO XXX AN ACC XXX A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17695 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21861 and AAA21501 to AAA21555 represent ribozyme cC AAA12323 to AAA21868 represent their corresponding target sequences; CC AAA1889 to AAA22168 represent their corresponding target sequences; CC AAA21689 to AAA22165 and AAA2363 to AAA23427 represent ribozyme sequence for integrin subunit beta 3, and AAA2364 represent ribozymes of the invention are used for modulating target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or CC AAA2369 to AAA22475 and AAA23263 to AAA2342 represent ribozymes of the invention are used for modulating the synthesis, expression and/or CC categorially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as concevabrated sequences, Sturge Weber CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, inhunit alpha-6, or riborin subunit alpha-6, or riborin subunit subunit beta-3 of ARMT, Tie-2, integrin subunit bet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local
                                                                                                                                                                                                                                                                               integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; archritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of an mRNA encoding
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                                     WO9950403-A2
                                                                                                         Homo sapiens
                                                                                                                                                                                                               myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA22691 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17
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                                                                                                                                                                             Kippel-Trenaunay-Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Integrin subunit beta 3 substrate sequence SEQ ID NO:5917.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3 A; 6 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       305pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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CC hydrocarbon nuclear transporter (ARMT) gene, an integrin submit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17622 represent ribozyme sequences for ARMT. CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18186 to AAA19086 cC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme cC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA22475 and AAA2363 to AAA21502 to AAA21500 and CC AAA21599 to AAA22475 and AAA2363 to AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23343 to CC AAA2342 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or CC stability of an mRNA encoding angiogenic factor, especially ARMT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as negotions of tuberous sclerosis, pot-wise stains, Sturge Weber candidation subdireme. Osler-Weber-Rendu syndrome.
Sequence 17 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes enzymatic nucleic acid cleaving activity, which specifically cleave RNA encode
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 54; Page 236; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-MAR-1998;
                                         syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ribozymes for modulating the synthesis, mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0079678P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                which specifically cleave RNA encoded by an aryl
0 C; 0 G; 0 T; 13 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coeshott
  0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          molecules with RNA
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Matches Query Match Best Local 428 TTTTATTTTATTTTT l Similarity 2; Conserv UUUUAUUUUUAUUAUUU 17 Conservative 1.5%; 443 13; Score 14.4; Pred. No. 1 Mismatches 1.8e+03; DB 1; بر --Length 17; Indels 0 Gaps 0

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RESULT 2176
AAA22960/c
ID AAA2296
XX AAA2296
XC AAA2296
XC Integri
XX Integri
XX Human;
XW integri
XW integri
XW integri
XW age rel
XW dermatc
XW dermatc
XW deres
XW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; 19-JUN-2000 AAA22960; AAA22960 standard; RNA; 17 Integrin subunit beta 3 substrate sequence SEQ ID NO:6186. (first entry)

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RESULT 2177
AAA22965/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC cleaving activity, which specifically cleave RNA encoded by an aryl CC cleaving activity, which specifically cleave RNA encoded by an aryl CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC carresponding target sequences; AAA17681 to AAA17622 represent ribozyme sequences for Tae-2, and AAA19184 represent ribozyme sequences for Tie-2, and AAA19185 to AAA19122 represent their corresponding target sequences; CC aAA19123 to AAA20361 and AAA21501 to AAA21955 represent ribozyme cc sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and CC AAA21596 to AAA21488 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA22362, AAA23343 to CC CAAA21489 to AAA22475 and AAA22363 to AAA23422 represent their corresponding target sequences of the invention are used for modulating the synthesis, expression and/or CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as CC canjotfibroma of tuberous sclerosis, pot-wine stains, Sturge Weber condictions and diseases related to the levels of ARMT, Tie-2, integrin subunit beta-3.
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                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 54; Page 253; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
                                                                                                                              19-JUN-2000
                                                                                                                                                                                                   AAA22965
                                                                                       Integrin subunit beta 3 substrate sequence SEQ ID NO:6191.
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                                                                                                                                                                                                                                                                                                                                 383 CCTCCCAAAGTGCTGG 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA encoding an angiogenic
                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                     15;
                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              subunit alpha-6, or integrin
                                                                                                                                                                                                                                                                                            CTTCCCAAAGTGCTGG
                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roberts E,
                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                  1.5%;
                                                                                                                                                                                                   RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                   <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                Score 14.4; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.
                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  subunit
                                                                                                                                                                                                                                                                                                                                                                                        1.8e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                     0;
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CC cleaving activity, which specifically gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA17675 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT. CC and AAA17168 to AAA17560 and AAA17635 to AAA17635 to AAA17694 represent their corresponding target sequences; AAA1635 to AAA18385 and AAA19086 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19086 to AAA19154 represent tribozyme sequences for Tie-2, and AAA19086 to AAA19154 represent tribozyme sequences for Tie-2, and AAA19086 to AAA19154 represent tribozyme sequences; AAA19154 represent tribozyme sequences; AAA19154 represent tribozyme sequences; CC and AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19233 to AAA20361 and AAA21501 to AAA21595 represent ribozyme sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23263 to AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23342 represent ribozymes of CC CAA231422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or CC stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related CC angiofibroma of tuberous sclercosis, pot-wine stains, Sturge Weber CC angiofibroma of tuberous sclercosis, pot-wine stains, Sturge Weber CC and other syndromes and diseases related to the levels of ARNT, Tie-2, CC integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; clear eyndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 54; Page 253; 305pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ribozymes for modulating the synthesis, mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coeshott C,
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Sequence 17 BP; v A; 5 C; 5 G; 0 T; 2 U; 0 Other;

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                                                  AAA22975,
                                                           RESULT 2178
                                                                                                              Matches
                                                                                                                           Query Match
                              AAA22975
                                            AAA22975
                                                                                                                     Local
                                                                                               212 TEGTCTCGAACTCCCG 227
                                                                                 17
                                                                                                              15;
                                                                                                                      Similarity
                                             standard; RNA; 17
                                                                                 TEGTCTCGAACTCCTG 2
                                                                                                              Conservative
                                                                                                                     1.5%;
                                                                                                              0
                                                                                                                     Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                                                                                               Mismatches
                                                                                                                             DB 1;
                                                                                                                             Length 17;
                                                                                                               Indels
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                                                                                                               Gaps
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0;

Integrin subunit beta 3 substrate sequence SEQ ID NO:6201.

19-JUN-2000

(first entry)

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RESULT 2179
AAA22835
ID AAA2283:
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                                                                                                                                                                                                                                                                                                                                                CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Fie-2, and AAA19087 to CC AAA19154 represent ribozyme sequences for Fie-2, and AAA19087 to CC AAA19154 represent tribozyme sequences for Fie-2, and AAA19087 to CC aAA19123 to AAA19222 represent their corresponding target sequences; CC AAA1923 to AAA19222 represent their corresponding target sequences; CC AAA1923 to AAA21688 represent their corresponding target sequences; CC AAA21696 to AAA21688 represent their corresponding target sequences; CC AAA21699 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23422, represent ribozyme of CC AAA23422 represent their corresponding target sequences. The ribozyme of CC AAA23422 represent their corresponding target sequences. The ribozyme of CC AAA23422 represent their corresponding target sequences. The ribozyme of CC AAA23422 represent their corresponding target sequences. The ribozyme of CC atability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as well as correspondences, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, CC and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                        Query Match
Best Local S
Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes enzymatic nucleic acid molecules with RNP cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-MAR-1999;
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                                                                                                                                                                               603
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                                                                                                                                                                                                                                                                                                                BP;
                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                A; 0 C; 0 G;
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                                                                                                                                                                                                                                                Score 14.4;
Pred. No. 1.
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                                                                                                                                                                                                                             Mismatches
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AAA22835 standard; RNA; 17 BP

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1034 CTGGGATTACGGGCAC 1049

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Matches

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The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17188 to AAA17563 and AAA17625 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19155 to AAA12622 represent their corresponding target sequences; CC AAA19232 to AAA21963 and AAA1865 to AAA1968 to AAA1968 co AAA1968 represent their corresponding target sequences; CC AAA19232 to AAA21561 to AAA21561 to AAA21562 represent ribozyme sequences; CC AAA1868 to AAA2168 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21675 and AAA23263 to AAA23242 represent ribozyme sequence CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence CC AAA21689 to AAA22475 and AAA23263 to AAA23343 to AAA23422 represent their corresponding target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or cespecially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as corresponding target sequences. They are cespecially used to treat cancer, diabetic retinopathy, age related consevent sequences and disease related to the levels of ARNT, Tie-2, integrin submit bata-3 are integrin submit bata-3 are related to the levels of ARNT, Tie-2, integrin submit bata-6 are syndrome, and disease related to the levels of ARNT, Tie-2, integrin submit bata-6 are integrin submit bata-8.
                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
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                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 54; Page 245; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAR-1998;
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                                                                                                                   integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ribozymes for modulating the synthesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA encoding an angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roberts E,
                                                                       BP; 4 A; 4 C; 6 G; 0 T;
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1.5%;
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Score 14.4; DB 1
Pred. No. 1.8e+03
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                                                                       3 U;
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                      Length 17;
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RESULT 2180
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                                                                                                                                                                                                                                                                                                                                                                                  cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA17884 represent their corresponding target sequences; AAA17885 to AAA18385 and AAA19087 to AAA19184 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19123 to AAA20361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21808 represent their corresponding target sequences; to AAA21586 represent their corresponding target sequences; AAA21596 to AAA21688 represent their corresponding target sequences; AAA21596 to AAA21475 and AAA23263 to AAA23362 to AAA23343 to AAA21596 to AAA23343 and AAA23342 represent ribozyme sequence for integrin subunit, beta 3, and AAA2376 to AAA3362, AAA33343 to AAA23343 to AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                      AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARND), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2,
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                                                                subunit alpha-6,
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                                                             integrin subunit beta-3
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Query Match 1.5
Best Local Similarity 75.0
Matches 12; Conservative

1.5%; 75.0%;

Score 14.4; DB 1; Pred. No. 1.8e+03;

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                                                                                                                                                                                                                                                   The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CAAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA1844 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CAAA19154 represent ribozyme sequences for Tie-2, and AAA19386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19232 to AAA20361 and AAA21591 to AAA21595 represent ribozyme sequences; C AAA19235 to AAA20361 and AAA21591 to AAA21595 to AAA21590 and C sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and C AAA21689 to AAA21689 to AAA21687 and AAA22363 to AAA23342 represent their corresponding target sequences; C AAA21689 to AAA22475 and AAA2363 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23343 to AAA23343 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiotibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                   AAA23422 represent their corresponding target sequences. The ribozymes the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes, and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 54; Page 239; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of an mRNA encoding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    an angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression and/or stability
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CC The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC aAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC aAA19234 represent ribozyme sequences; CC AAA19232 to AAA20361 and AAA21501 to AAA2155 represent ribozymes (CC AAA19232 to AAA2168 and AAA21501 to AAA2155 represent ribozyme sequences; CC AAA21689 to AAA22463 and AAA23561 to AAA23742 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to CC AAA21689 to AAA22475 and AAA23263 to AAA23362, AAA23343 to CC AAA21689 to AAA22475 and AAA23263 to AAA23362, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as correspondences and archarits, as well as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2182
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antisporiatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 54; Page 244; 305pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Integrin subunit beta 3 substrate sequence SEQ ID NO:6044
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
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Pred. No. 1.8e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen JA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2183
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Best Local S
Matches 13
                                                                                                                               with a target sequence and contain at least one phosphoro(di)thioate link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor gene, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or for other conditions associated with levels of oestrogen receptor. Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research particularly for identification of the repetition targets.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothicate; endonuclease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 4 A; 4 C; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndand other syndromes and diseases related to the levels of ARNT, T
              reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of modifications in (A) improves resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA24748 to AAA25992 represent their corresponding target sequences. AAA25993 to AAA26105 represent their corresponding target sequences, and AAA26107 to AAA26218 represent their corresponding target
                                                                                                                                                                                                                                                                                            The present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                              Claim 77; Page 71; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acids that interact,
                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-013248/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thompson JD, Reynolds M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-APR-1998;
23-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  anticancer; breast cancer; endometrium cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1679
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13; Conser
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                                                                                                                                                                                                                                                                                                                                                                    cancer.
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98US-00103636
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to AAA26271 represent
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is T, Woolf T,
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Pred. No. 1.8e
2; Mismatches
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Haeberli
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VT, Tie-2,
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RESULT 2184
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RESULT 2185
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                                                                                                                                         The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP) Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of consequently increases expression of) genes involved in the
                                                                                                                                                                                                                          Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein,
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF05508 standard; DNA; 17 BP
                                                                                                           Sequence 17
                                                                                                                                    erythropoietin,
                                                                                                                                                                                                  Claim 18; Page 118; 164pp; English.
                                                                                                                                                                                                                 useful for producing e.g. granulocyte interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                  WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                 Blatt L,
                                                                                                                                                                                                                                                                                                12-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                              interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme; erythropoietin;
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         AAF06148
                                                                                                                            interferon alpha
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                                                                                                                                    colony stimulating
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Pred. No. 1.8e+03;
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Pred.
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No. 1.
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                                                                                                                                                                     RESULT 2186
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standard;

DNA:

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Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hammerhead ribozyme substrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF06148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               erythropoietin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 42; Page 123; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interferon alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-FEB-2001
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                              Hammerhead ribozyme substrate #2948.
                                                                                                                                                                                                                                                                                       16-FEB-2001
                                                                                                                                                                                                                                                                                                                           AAF06151;
                                                                                                                                                                                                                                                                                                                                                                    AAF06151 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-)
12-APR-1999;
                                    11-APR-2000; 2000WO-US009721.
                                                                        19-OCT-2000
                                                                                                               WO200061729-A2
                                                                                                                                                                                        interferon alpha;
                                                                                                                                                                                                          Ribozyme; erythropoietin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-647423/62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 2; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0129390P
99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 granulocyte
                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                                                                                    DNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.5%;
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                                                                                                                                                                                                          granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 0 T; 13 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 colony stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 factor protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
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RESULT 2187
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythopoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 2 A; 1 C; 1 G; 0 T; 13 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            DNA-RNA-DNA oligonucleotide AGT02014 used to test RNase H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic
                                              Probes for detecting target nucleotide sequence in sample, has sequence that forms hairpin structure having a double-stranded segment and single
                                                                                                                                                                                                                                           WO200206531-A2
                                                                                                                                                                                                                                                                                          misc_RNA
                                                                                                                                                                                                                                                                                                                                                    DNA-RNA hybrid; RNase H; nucleic acid detection; ss
                                                                                                                                                                                                                                                                                                                                                                                                     23-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                             ABA91530
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                                  stranded
                                                                                                                                                        14-JUL-2000; 2000US-00616761.
30-MAR-2001; 2001US-00823647.
                                                                                                                                                                                           12-JUL-2001; 2001WO-US022166
                                                                                                                                                                                                                   24-JAN-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interferon
                                                                                                                                (GENE-) APPLIED GENE TECHNOLOGIES
                                                                                 2002-171819/22
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                                  doot
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and antisense nucleic acid inhibition of repressor genes, r producing e.g. granulocyte colony stimulating factor protein, n alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 123; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zwick M,
                                  hairpin structur
oop collectively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                  /*tag= a
/label= RNA
                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
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No. 1.
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                                  complementary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
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                                  to target
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Example 4; Page 49; 72pp; English

customer orders for custom-designed biochips in an automated process. The invention also includes an automated system and process for providing a fully automated process for the design, manufacture and analysis of data for biological array devices. The sequence represents a capture probe designed in the invention for the "sample ataxia" set of targets, as an

example of an array that may be designed

using the

o H

The invention relates to a novel process for a manufacturer to obtain customer orders for custom-designed biochips in an automated process.

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ABN83023/c
ID ABN830
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide AGT02014. This is one of a set of oligonucleotides (see ABA91527-30) used to assess the minimum number of ribonucleotides in DNA-RNA chimeric oligonucleotides required for RNase H cleavage. Each oligonucleotide of the set had a different number of ribonucleotides, 1 in the present case. The oligonucleotides were mixed with target DNA oligonucleotide AGT02009 (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30 minutes. The results showed that 4 ribonucleotides were the minimum number for RNA cleavage. The invention provides probes for nucleic acid hybridisation. The probes form a halipin structure comprising a double-stranded stem and single-stranded loop, and are capable of both intramolecular and intermolecular hybridisation. The double-stranded stem may comprise a methylphosphonate DNA-RNA hybrid that is resistant to be a second of the comprise of the comprise of both control of the comprise of the comprise of the comprise of both control of the comprise of the com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ataxia telangiectasia locus 56594896-WNeg-t capture probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABN83023;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNASE H Cleavage. When the probe hybridises with a target DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and can be removed. Arrays and methods for nucleic acid hybridisation using
                                                                                                                                                                           Example 5; Page 21; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-APR-2000;
22-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ataxia telangiectasia; probe; biochip; array; capture; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN83023
                                                                                                                                                                                                                                               desired target sequences f
for an array and applying
                                                                                                                                                                                                                                                                                             Automated process for custom-designed biochip design,
                                                                                                                                                                                                                                                                                                                                        WPI; 2002-017664/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200180155-A2
                                                                                                                                                                                                                                                                                                                                                                                  Anderson BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                 (COMB-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               removed. Arrays and methods for bes are provided
                                                                                                                                                                                                                                                                                                                                                                                                                                 COMBIMATRIX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
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2000US-0252880P
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                                                                                                                                                                                                                                                                                                                                                                                  Quarles
                                                                                                                                                                                                                                               sequences from customer, creating sequence ad applying the motif to a surface suitable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                  PA,
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                                                                                                                                                                                                                                                                                             comprises obtaining
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RESULT 2189
ADG14612
ID ADG1461
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CC therapeutic response to the administration of interferon-alpha-2b and cribavirin for the treatment of a pathological condition, especially cC hepatitis C virus (HCV) infection. The method involves determining which called form is present at positions -3575, -2763, -1082, -819 and -592 co f the interleukin-10 (IL-10) regulatory region, and comparing these with cC the allelic forms at these positions which are associated with a known coutcome of interferon-alpha-2b and ribavirin administration. Presence of the single nucleotide polymorphisms -592A and -819T, the -592A/A or -CC 819T/T genotypes, the combination of -592A/-819T as a haplotype, cC the (108)TCATA haplotype (encompassing positions -3575, -2763, -1082, -CC the (108)TCATA haplotype (encompassing positions -3575, -2763, -1082, -CC and -592) is associated with a sustained response to interferon-alpha cC end of the combination of -592A/-819T as a genotype, or possession of the (108)TCACC haplotype indicates that the presence of -592C and -819C, cc or the (108)TCACC haplotype indicates that the patient will be non-cc cresponsive to this therapy. The method optionally further comprises contigen-4 (CTLA-4) promoter and the allele at position 49 of exon 1 of cc the CTLA-4 gene. The invention also encompasses kits and oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL-10 regulatory region; single nucleotide polymorphism; SNP; haplotype genotype; cytotoxic T-lymphocyte antigen-4; CTLA-4 promoter; CTLA-4 exon 1; bacterial infection; meningococcal infection; rheumatoid arthritis; systemic lupus erythematosus; Sjogren's syndrome; inflammatory bowel disease; multiple sclerosis; human; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Predicting a therapeutic response comprises comparing a first nucleic acid allele in an interleukin-10 (IL-10) regulatory region with a second nucleic acid allele in the IL-10 regulatory region associated with a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADG14612
                                                                                                                                                                                                                                                                                                                                                                                  Claim 12; SEQ ID NO 3; 34pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-707021/76.
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                                                                                                                                                                                                                                                                                                                                                   The invention relates to a method for predicting an individual's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   676 CACTGCAACCTCTGCC 691
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 4 A; 2 C; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       response; therapeutic outcome; interferon-alpha-2b; nepatitis C virus; HCV infection; interleukin-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 regulatory region PCR primer IL10-2763CR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.4; DB 1;
Pred. No. 1.8e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; haplotype;
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RESULT 2190
ABT36747
ID ABT3674
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   primers for use in the methods of the invention. The method and primers are useful for identifying and analysing genetic polymorphisms in the IL 10 regulatory region and/or cytotoxic T-lymphocyte antigen-4 which can bused in predicting an individual's response to therapeutic intervention with interferon-alpha-2b and ribavirin for HCV infection, and for predicting the responsiveness of an individual to therapy for a predicting the responsiveness of an individual to therapy for a pathological condition, or for predicting the outcome of therapeutic intervention in pathological conditions such as bacterial infection (e.g. meningococcal infection), rheumatoid arthritis, systemic lupus erythematosus, Sjogren's syndrome, inflammatory bowel disease or multiple erythematosus, Sjogren's syndrome, inflammatory bowel disease or multiple
given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic containing the polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; antisense; sense; tumour; cell degeneration; cancer; Alzheimer schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     erythematosus, Sjogren's syndrome, inflammatory bowel diseas sclerosis. The present sequence is related to the invention.
                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.
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                                                                                                                                                                                                                       The invention relates to a novel isolated 17 mer nucleic acid sequence
                                                                                                                                                                                                                                                            Disclosure; Page 311; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                           Telerman
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                                                                                                                                                                                                                                                                                                                                                                                                           Tuijnder M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           opic; neuroleptic; gene cancer; Alzheimer's die
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17
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                                                                                                                                                                                                                                                                                                                     associated antibodies
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RESULT 2191
ABT39415/c
ID ABT3941
               The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaccuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 15
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schizophrenia; ;
human fukutin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disgnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumour suppression related human fukutin oligo SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 624; 720pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sense; tumour; cell degeneration; cancer; Alzheimer
nia; protein chip; gene therapy; tumour suppression;
tin; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acid, useful for treating viral diseases degeneration, also related polypeptides,
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                        cc given in the specification, a sequence containing at least 15 consecutive cnucleotides from the 17 mer sequence with, after optimal calignment, at least 80 % identity to the 17 mer sequence a sequence that the team under highly stringent conditions, or the complement confides to them under highly stringent conditions, or the complement confides to them, or the corresponding RNA. The novel isolated nucleic cacids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for component of gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for comparation of pharmaceuticals for prevention and/or treatment of viral consesses that are characterised by development of tumours or cell containing the suggestion of the expression of the 17 mer nucleic acids in Schizophrenia. Analysis of the expression of the 17 mer nucleic acids in the containing the segment containing the contain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive
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KW Cytoste
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KW antiser
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CC The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence with, after optimal CC alignment, or the moder highly stringent conditions, or the complement CC of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, coplypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaccuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and coparation and proposes of these containing the patient samples is useful for diagnosts and/or prognosis of these containing the polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene containing chips. The nucleic acid sequences of the invention can be used in gene containing the containing chips. The nucleic acid sequences of the invention can be used in gene containing the containing contain
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           The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that CC hybridizes to them under highly stringent conditions, or the complement CC dries of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and containing the schizophrenia. Analysis of the expression of the 17 mer nucleic acids in CC diseases. The polypeptides can also be used to generate antibodies, and CC diseases. The polypeptides can also be used to generate antibodies, and CC diseases. The nucleic acid sequences of the invention can be used in gene CC therapy. This polynucleotide sequence represents a tumour suppression of their invention can be used in gene characterise of the invention can be used in gene contained to components of these contained the invention can be used in gene contained to component to contain the contained the invention can be used in gene contained to contain the contained to component to contain the contained to contained to contain the contained to c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein chip; gene ds.
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Pred. No. 1
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ABT39345/c
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                         cc given in the specification, a sequence containing at least 15 consecutive confucles from the 17 mer sequence, a sequence with, after optimal cc alignment, at least 80 % identity to the 17 mer sequence, a sequence that cc hybridizes to them under highly stringent conditions, or the complement cof any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one cc component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cpl. as one cc production of recombinant polypeptides. Any of the nucleic acids, colls containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell containing the specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in Cc diseases. The polypeptides can also be used to generate antibodies, and cohps. The nucleic acid sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene chips. This polynucleotide sequence represents a tumour suppression crelated human fukutin oligonucleotide of the invention
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 616; 720pp; French.
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human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour suppression related human fukutin oligo SEQ
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Pred. No. 1.8e+03;
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Sequence 17

BP;

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Length 17;

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ABT37
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ABT37365/c
                            component of a gene chip, in vitro as and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cplypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaccuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression crelated human fukutin oligonucleotide of the invention
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Best Local
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15; Conserv
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Pred. No. 1.8e+03;
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antibodies
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Best Local Similarity

1.5%; 7 C; 2 G;

Score 14.4; Pred. No. 1 3 T; 0 U;

1.8e+03;

DB 1;

Length 17;

Query Match Best Local S Matches 15

Similarity

1.5%;

Score 14.4; DB 1;

Length 17;

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Mismatches

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1.8e+03

Sequence 17

BP; 2

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œ C; 2

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ABT38008
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                               degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; antisense; sense; tumour; cell degeneration; cancer; Alzheimer
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                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel isolated 17 mer nucleic acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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disease;
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532

ATCCTCCTGCCTCAGC 547

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ATCATGGCTCACTGCA 17

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                                                                                                           RESULT 2199
ABT35457
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                                                                                                                                   The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal calignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement cof any of them, or the corresponding RNA. The novel isolated nucleic cacids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic containing the cyctor or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell capaness that are characterised by development of tumours or cell capaness that are characterised by development of tumours or cell capaness. The pulpeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of these chips. The nucleic acid sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene chips. This polynucleotide sequence represents a tumour suppression crelated human fukutin oligonucleotide of the invention
                                 Query Match
Best Local S
Matches 15
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                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 161; 720pp; French.
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667 ATCTTGGCTCACTGCA 682
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                                                    Similarity
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                                                                                                           17
                                   Conservative
                                                                                                         BP; 4 A;
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                                                  1.5%;
93.8%;
                                                                                                         5 C; 4 G; 4 T; 0 U; 0 Other;
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                                   0;
                                                  Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                   Mismatches
                                                                     DB 1; Length 17;
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                                   Indels
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                                   Gaps
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Matches

15;

Conservative

0

Query Match Best Local Similarity

1.5%;

Score 14.4; Pred. No. 1.8); Mismatches

DB 1; .8e+03;

Length 17; Indels

0.

Gaps

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RESULT 2200
ABT36801/c
                                   CC given in the specification, a sequence containing at least 15 consecutive controllers from the 17 mer sequence with, after optimal controllers to them the 17 mer sequence with, after optimal controllers to them under highly stringent conditions, or the complement cof any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, contentifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, colls containing the corresponding RNA in the nucleic acids, colls containing the component of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of themours or cell diseases that are characterised by development of themours or cell containing the spatial sandysis of the expression of the 17 mer nucleic acids in CC diseases. The polypeptides can also be used to generate antibodies, and contains the polypeptide and antibodies are useful as components of these cards sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene contains of the cards sequence represents a tumour suppression contains.

The nucleic acid sequence of the invention can be used in gene contains of the invention can be used in gene contains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive
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  BP; 4 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuijnder M;
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RESULT 2201
ABT36337/c
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                                                                                                                                                                             CC Given in the specification, a sequence containing at least 15 consecutive concelled in the specification, a sequence with, after optimal conditions from the 17 mer sequence with, after optimal confidence from the 17 mer sequence with, after optimal confidence in the state of the corresponding RNA. The novel isolated nucleic confidentifying quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of paramaceuticals for prevention and/or treatment of viral cdiseases that are characterised by development of tumours or cell cdiseases that are characterised by development of tumours or cell cdiseases that are characterised by development of tumours or cell continuents. Analysis of the expression of the 17 mer nucleic acids in components of these caid sequences of the invention can be used in gene caid sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene characterise of the invention can be used in gene chips. The polypeptide and antibodies are useful as components of protein characterise of the invention can be used in gene chips.
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               with tumors and cell d
and transfected cells.
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                                                                                                                                                 Sequence 17 BP;
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                                    386
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  17
                                                                        l Similarity
                                  CCCAAAGTGCTGGGAT 401
  CCCAAAGTGCTGAGAT 2
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                                                                          Conservative
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                                                                                                                                                 Α;
                                                                                        1.5%;
                                                                                                                                                 4 C; 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M;
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                                                                                                                                                   ဂ္
                                                                                                        Score 14.4;
                                                                                              Pred. No.
                                                                                                                                                 5 T; 0 U; 0 Other;
                                                                            Mismatches
                                                                                            1.8e+03;
                                                                                                                DB 1;
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RESULT 2202

RESULT 2203 ABT34597 ID ABT3459

ABT34597 standard; DNA; 17

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Matches

532 N

ATCCTCCTGCCTCAGC 547 ATCCTCCTGCTTCAGC 17

Conservative

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ABT37220
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                                                                                                                                                                                                                  CC given in the specification, a sequence containing at least 15 consecutive conditions at least 15 consecutive conditions, at least 15 containing to the 17 mer sequence with, after optimal conditions, or the complement conditions, or the complement conditions, or the complement conditions of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (antilsense reagents, and for component of a gene chip, in vitro as (antilsense reagents, and for component of a gene chip, in vitro as (antilsense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, the colypeptides are useful for conformation of pharmaceuticals for prevention and/or treatment of viral conformation, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in containing the expression of the 17 mer nucleic acids in containing the expression of the 17 mer nucleic acids in containing the expression of the 18 mer nucleic acids in containing the expression of the 18 mer nucleic acids in containing the expression of the 18 mer nucleic acids in containing the expression of the 19 mer nucleic acids in containing the expression of the 19 mer nucleic acids in containing the expression of the 19 mer nucleic acids in containing the expression of the 19 mer nucleic acids in containing the expression of the 19 mer nucleic acids in containing the con
                                 Query Match
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schizophrenia; 
human fukutin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                    Sequence 17
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                                         Similarity
                                                                                                                                                        BP; 2
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                                                                                                                                                        A; 7 C; 3 G;
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                                 1.5%;
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Score 14.4; D
Pred. No. 1.8e
0; Mismatches
                                                                                                                                                        5 T; 0 U; 0 Other;
                                         1.8e+03;
                                                                          DB 1; Length 17;
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                                                                  ABT36198/c
                                                                                       RESULT 2204
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                                                                                                                                                                                                                                                                       Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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ABT36198;
                                             ABT36198 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   with tumors and cell d
and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-JUN-2003
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                                                                                                                                                                                                                                               Local Similarity
nes 15; Conserv
                                                                                                                                                                                                    532
                                                                                                                                                            N
                                                                                                                                                                                                    ATCCTCCTGCCTCAGC 547
                                                                                                                                                            ATCCTCCCGCCTCAGC 17
                                                                                                                                                                                                                                               1.5%;
ilarity 93.8%;
Conservative
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                                                                                                                                                                                                                                                                                                                                         2 A;
                                                                                                                                                                                                                                                                                                                                           9 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                       Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                            Length 17;
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ABT36270
ID ABT3
XX
AC ABT:
XX
DT 12-,

ABT36270;

ABT36270 standard; DNA; 17 BP

12-JUN-2003

(first entry)

RESULT 2205

Ş 밁

Matches

15;

Conservative

0;

Mismatches

<u>.</u>

Gaps

0

Pred. No.

1.8e+03

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The invention relates to a novel isolated 17 mer nucleic acid sequence, containing at least 15 consecutive containing at least 15 containing at conditions, or the complement containing of them, or the corresponding RNA. The novel isolated nucleic acids of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of protein antibodies directed against the polypeptides are useful for corresporation of pharmaceuticals for prevention and/or treatment of viral conservation, specifically cancer but also Alzheimer's disease and constitution and antibodies are useful as components of these containing the expression of the 17 mer nucleic acids in containing the expression of the 17 mer nucleic acids in containing the expression and/or prognosis of these containing the expression and/or prognosis of these containing the expression and the polypeptides and antibodies are useful as components of protein containing the containing the containing the expression of the invention can be used in gene containing the containing the containing the containing the expression of the invention can be used in gene containing the c
Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-JUN-2003 (first entry)
                                                                                  Sequence 17 BP; 5 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 247; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A, Amson R,
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1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tuijnder M;
                         Score 14.4;
                               DB 1;
                         Length 17;
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Tumour suppression related human fukutin oligo SEQ ID

No 1907

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The invention relates to a novel isolated 17 mer nucleic acid sequence, cc given in the specification, a sequence containing at least 15 consecutive cnucleotides from the 17 mer sequence, a sequence with, after optimal cc alignment, at least 80 % identity to the 17 mer sequence that cc hybridizes to them under highly stringent conditions, or the complement cof any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, cc identifying, quantifying and/or amplifying a nucleic acid, e.g. as one cc component of a gene chip, in vitro as (anti)sense reagents, and for cc production of recombinant polypeptides. Any of the nucleic acids, cc polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for cc preparation of pharmaceuticals for prevention and/or treatment of viral cd degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in containt samples is useful for diagnosis and/or prognosis of these containing chipseptides. The pucleic acid sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise of the invention can be used in gene characterise.
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                                                                                                                                            RESULT 2206
ABT34566
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and transfected cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides,
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Tumour suppression related human fukutin oligo SEQ ID No 203
                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4
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                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                   381 AGCCTCCCAAAGTGCT 396
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                                                                                                                                                                                                                                                                                                            | Similarity
                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                              Conservative
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                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              A; 6 C; 3
                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                               1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                              G; 4 T; 0
                                                                                                                                                                                                                                                                                                              0;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                 Score 14.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                              U; 0
                                                                                                                                                                                                                                                                                                                                 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                              Other;
                                                                                                                                                                                                                                                                                                                                                  Length 17;
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SXSXFXBXB

12-JUN-2003 ABT37351;

(first

entry

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;

Tumour suppression related human fukutin oligo SEQ ID No 2988

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The invention relates to a novel isolated 17 mer nucleic acid sequence, completed in the specification, a sequence containing at least 15 consecutive controlled from the 17 mer sequence with, after optimal constraints at least 80 % identity to the 17 mer sequence that thybridizes to them under highly stringent conditions, or the complement confirmed from the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, colypeptides, vectors containing the mucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for comparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Altheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in gating the supeful for diagnosis and/or prognesis of these containing the useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymetide sequence of the invention can be used in gene charactering containing the useful as components of protein charactering the polyment of the sequences of the invention can be used in gene containing the used to generate antibodies.
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ABT37351 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17
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                                                                                                                                                                                                                                           532 ATCCTCCTGCCTCAGC 547
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                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; 9 C; 2 G; 4 T;
                                                                                                                                                                                                                                                                                                                                                  1.5%;
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   ВÞ
                                                                                                                                                                                                                                                                                                                    Score 14.4; DB 1
Pred. No. 1.8e+03
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
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                                                                                                                                                                                                   ABT39059
                                                                                                                                                                                                                      RESULT 2208
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; geantisense; sense; tumour; cell degeneration; cancer; Alzheimer's schizophrenia; protein chip; gene therapy; tumour suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011978
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                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 382; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                       Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and transfected cells.
                                                                                                             12-JUN-2003
                                                                                                                                                                                  ABT39059 standard;
                                                                                                                                                                                                                                                                                                              480
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                                                                                                                                                                                                                                                                                                         GTGCAGTGGTGATC 495
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                                                                                                                                                                                  DNA; 17
                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                             entry)
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Pred. No. 1.8e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                   .8e+03;
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                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                              Gaps
                      disease;
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RESULT 2209 ACA06514

ACA06514 standard;

RNA; 17

ВP

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Gaps

0

NFKB

sub-unit

modulating inozyme substrate #333.

03-JUN-2003

(first entry)

ACA06514;

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; cesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma;

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                                                                                                                                                The invention relates to a novel isolated 17 mer nucleic acid sequence, cc given in the specification, a sequence containing at least 15 consecutive conditions are useful as sequence with, after optimal conditions of the invention are useful as probes and primers for detecting, containing of the invention are useful as probes and primers for detecting, conditions of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for component of pharmaceuticals for prevention and/or treatment of viral conditions, specifically cancer but also Alzheimer's disease and conditions, specifically cancer but also Alzheimer's disease and conditions and protein as and propersion of the sequences of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these conditions. The nucleic acid sequences of the invention can be used in gene chips. The nucleic acid sequences of the invention can be used in gene conditions. The nucleic acid sequences of the invention can be used in gene conditions.
                                           Matches
                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                       Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 583; 720pp; French
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                                                            Local
  837 GATCTGCCTGCCTCGG 852
                                           15;
                                                              Similarity
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                                           Conservative
                                                          1.5%;
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                                                              Pred.
                                                                           Score 14.4;
                                           Mismatches
                                                              No.
                                                              1.8e+03;
                                                                                   DB 1;
                                                                               Length 17;
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human;

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The Invention describes an energy assistant of nuclear factor regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, Zinzyme, G-Cleaver or amberzyme C configuration. The enzymatic nucleic acid molecule is adapted to treat to the second in the second in the second in the cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg^2+. The enzymatic and cantisense nucleic acid molecules are useful for treating breast, lung, corrostate, colorectal, brain, ossophageal, stomach, bladder, pancreatic, corrostal, head and neck, ovarian cancer, melanoma, lymphoma, glioma or contribute such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cyclophosphamide, doxorubin, streating inflammatory disease such as rheamatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obsesty, autoimune disease, lupus, multiple sclerosis, transplant/graft cobsesty, autoimune disease, lupus, multiple sclerosis, transplant/graft
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18-MAY-1994;
15-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel enzymatic nucleic acid molecules which down regulates expression a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Page 32; 72pp; English.
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                                                                                                 Sequence
                                                                                                                                                                                                       rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease of infection. This sequence represents the substrate of a novel enzymanifection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention describes an enzymatic nucleic acid molecule (I) which down
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DRAP/)
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MCSWIGGEN J.
                                                                                                                                                                          acid
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                                                                                                     BP;
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                                                                                                                                                                          molecule
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94US-00245466.
94US-00291932.
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Score 14.4;
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                      The invention describes an enzymatic nucleic acid molecule (I) which down cregulates expression of a sequence encoding a subunit of nuclear factor c kappa B (WFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for C(I) is useful for cleaving a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg 2^+. The enzymatic and cantisense nucleic acid molecules are useful for treating breast, lung, creating resistant cancer, melanoma, lymphoma, glioma or cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or charagies such as monoclonal antibodies, REL-A-specific inhibitors or complete such as monoclonal antibodies, REL-A-specific inhibitors or cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cgencitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as resumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obsestly, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infertion missing services or the substrate of a novel enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma; lymphoma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel enzymatic nucleic acid molecules which down regulates expression a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
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15-AUG-1994;
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) MCSWIGGEN J.
) DRAPER K G.
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94US-00291932.
96US-00777916.
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Best Local
                                                                                                                                                 proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 1fp11.2 and MDZ12 is encoded at chromosome 1fp11.2 and MDZ12 is encoded at chromosome 1fq26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                           New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1;
                                                                                                 useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human MDZ7 scanning oligonucleotide SEQ ID 5305
                                                                                                                                                                                                                                                                                                                                           The present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                             Example 8; SEQ ID NO 5305; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-423107/40.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          developmental disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB04319 standard; DNA; 17
               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    711 TCCTGCCCCAGCCTCC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ζ,
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                                                                     17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gu Y, Nguyen
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                                                                 4 A;
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75.0%;
               93.8%;
                                                                 4 C; 7
                              1.5%;
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                                                                 G; 2 T; 0 U;
 0
               Score 14.4; DB 1; Length 17; Pred. No. 1.8e+03;
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Pred. No. 1.
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                                                                   0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
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RESULT 2213 ADB04436 ID ADB0443

ADB04436 standard; DNA; 17

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RESULT 2212
ADB04448
ID ADB0444
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                                                                                    Query Match
Best Local
                                                                     Matches
                                                                                                                                                                                                                         proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 15q26.1. The MDZ3 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12. The probes are alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 15p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                         useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disorcassociated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                                                                                                                        Sequence 17 BP; 4 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-AUG-2001; 2001US-00922181
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                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; SEQ ID NO 5434; 103pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       iomo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 652 GAGTGCAGTGGCGCAA 667
                                  779 TTTAGTAGAGATGGGG 794
                                                                    15;
                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard; DNA; 17
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                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nguyen
                                                                                    1.5%;
                                                                    0
                                                                                    Score 14.4; DB 1
Pred. No. 1.8e+03
                                                                     Mismatches
                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5434
                                                                       Indels
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                                                                     0,
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                                                                     Gaps
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                                                                                               RESULT 2214
ABZ60588
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                                                                                                                                                                                        Matches
                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-423107/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JUL-2002; 2002EP-00016874.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           zinc finger
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; SEQ ID NO 5422; 103pp; English.
Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
                                                                                                                                                                                                                                  Sequence 17 BP; 4 A; 0 C; 2 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AEOM-) AEOMICA INC
                      Human K-Ras DNAzyme
                                            21-MAR-2003
                                                                 ABZ60588;
                                                                                      ABZ60588 standard;
                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                             MD27 or MDZ12, e.g. cancer.
                                                                                                                                                                                        15;
                                                                                                                                            N
                                                                                                                                                                                                   Similarity
                                                                                                                                                           TTTTTTGTATTTTAG 783
                                                                                                                                             TATTTTGTATTTTAG 17
                                                                                                                                                                                                                                                       The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gu Y, Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein; MDZ3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunostimulant;
                                                                                                                                                                                        Conservative
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                                            (first entry)
                                                                                     RNA; 17
                      substrate #700
                                                                                                                                                                                               1.5%;
93.8%;
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                                                                                                                                                                                       0,
                                                                                                                                                                                       Score 14.4; DB 1;
Pred. No. 1.8e+03;
0; Mismatches 1
                                                                                                                                                                                                             DB 1;
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                                                                                                                                                                                                           Length 17;
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Best Local
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Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; antianti-rheumatic; cancer; AIDS; ss.

29-MAY-2002; 2002WO-US016840

05-DEC-2002. WO200297114-A2 Homo sapiens. Human K-Ras DNAzyme substrate

#692.

21-MAR-2003

(first entry)

ABZ60580 standard; RNA; 17

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acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ6531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66558 represent substrate/target sequences for the human ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-human immunodeficiency virus (HIV) or a component of HIV. The nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAY-2001; 2001US-0294140P
06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
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                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 3 C; 6 G; 0 T; 4 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 58; Page 98; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-140484/13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2002; 2002WO-US016840
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                                                           869 GATTACAGGCGTGAGC 884
                                                                                                                l Similarity
12; Conservat
GAUUACAGGCGUGUGC 16
                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PHARM INC
                                                                                                                                               1.5%;
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                                                                                                                      Score 14.4; DB 1
Pred. No. 1.8e+03
3; Mismatches
                                                                                                                                                                                                                                                0 Other;
                                                                                                                                                                                    DB 1;
                                                                                                                         Indels
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                                                                                                                         Gaps
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RESULT 2216
ABZ60579
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59389 - ABZ6216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human riborates.
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06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
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06-JUN-2001; 2001US-0296249P
10-SEP-2001; 2001US-0318471P
                                                                                                                                                                                                                                                                                                Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
                               WPI; 2003-140484/13.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding
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Novel short interfering
                                                                                                                                                                             29-MAY-2002; 2002WO-US016840
                                                                                                                                                                                                                                        WO200297114-A2
                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                             Human K-Ras DNAzyme substrate #691
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ60579 standard; RNA; 17 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME
                                                                                        (RIBO-) RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1000 TCAAGCGATTCTCCTG 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     K-Ras, H-Ras, N-Ras, and human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UCAAGCGAUUCUCGUG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PHARM INC
                                                                                          PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.5%;
 RNA and enzymatic nucleic acid useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   deficiency virus sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
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 for
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FFX8X22222222222
                                                                                                                     treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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English.

expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66524, ABZ66520 - ABZ66524, ABZ66530 - ABZ66524, ABZ66530 - ABZ66520 ribozymes of the invention The invention ABZ66530 - ABZ66585 represent substrate/target sequences for the human acid molecule relates to a novel short interfering RNA (siRNA) nucleic or an enzymatic nucleic acid molecule, that modulates

Sequence 17 BP; 4 A; 4 C; 4 G; 0 T; 5 U; 0 Other;

Matches Query Match Best Local Similarity 11; Conservative 1.5%; 4 Score 14.4; Pred. No. 1 Mismatches .8e+03; DB 1; : Length Indels 0, Gaps 0

δ 밁 997 N GGUUCAAGCGAUUCUC 17 GGCTCAAGCGATTCTC 1012

RESULT 2217 ABZ60570 ID ABZ6057 Human K-Ras DNAzyme 21-MAR-2003 ABZ60570 standard; ABZ60570; (first entry) RNA; 17 substrate #682.

Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; 88.

WO200297114-A2 Homo sapiens.

05-DEC-2002. 29-MAY-2002; 2002WO-US016840.

29-MAY-2001; 2001US-0294140P. 06-JUN-2001; 2001US-0296249P. 10-SEP-2001; 2001US-0318471P.

(RIBO-) RIBOZYME PHARM INC

Mcswiggen

2003-140484/13.

Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

Claim Page 98; 185pp; English.

The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, N-Ra human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anticule of the invention has cytostatic, anti-HIV, activity. The nucleic acid molecules are useful for reducing N-Ras,

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RESULT
ABZ6060
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Best Local :
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06-JUN-2001;
10-SEP-2001;
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                                           The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ55989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ6530 - ABZ66585 represent substrate/target sequences for the human in the context of the human acid acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                       Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human K-Ras DNAzyme substrate #712
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                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen
                                                                                                                                                                                                                                         Claim
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   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655 TGCAGTGGCGCAATCT 670
                                                                                                                                                                                                                                         58; Page 98; 185pp; English.
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     17
                                   of the invention
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   ₿P;
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2001US-0296249P.
2001US-0318471P.
 3 A;
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 4 C; 6 G; 0 T; 4 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
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Pred. No. 1.8e+03
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     0 Other;
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Query Match Best Local Similarity

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Score 14.4; Pred. No. 1

1.8e+03;

DB 1;

Length

17;

RESULT 2220 ACC66396

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ACC66396

standard; DNA; 17

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ABZ60607
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Matches
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                                                                                Query Match
                                                                                                                                                  acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2001; 2001US-0294140P-
06-JUN-2001; 2001US-0296249P-
10-SEP-2001; 2001US-0318471P-
                                                                                                                                                                                                                                                                                                                                                        Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             anti-rheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human K-Ras DNAzyme substrate #719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ60607;
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                                                                                                           Sequence 17 BP; 5 A; 6 C; 2 G; 0 T; 4 U;
                                                                                                                                      ABZ66530 - ABZ66585 represent ribozymes of the invention
                                                                                                                                                                                                                                                                                                 The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                                                                                                            Claim 58; Page 98; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
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                                                                   Local
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                          1124 AACTCCTGACCTCAGG 1139
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ш
                                                                    Similarity
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AACUCCUGACCUCAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer; AIDS; 88.
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                                                                 1.5%;
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                                                       Score 14.4; D
Pred. No. 1.8e
3; Mismatches
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                                                                      1.8e+03;
                                                                                                               0 Other
                                                                                  DB 1;
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                                                                                  Length 17;
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                                                          Indels
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RESULT 2221
ACC68207/c
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Best Local
                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour suppression; viral disease; tumou schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid, useful f with tumors and cell degeneration, and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
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WO2003025176-A2.
                                                                    Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine oligonucleotide associated with tumour supression,
                           Mus musculus
                                                                                                                                Murine oligonucleotide associated with tumour supression,
                                                                                                                                                             01-JUL-2003
                                                                                                                                                                                                                       ACC68207 standard;
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                                                        schizophrenia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                           837 GATCTGCCTGCCTCGG 852
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                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 1 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 456; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                             (first entry)
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                                                           88.
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93.8%;
                                                                                                                                                                                                                         DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acid, useful for treating viral diseases associated degeneration, also related polypeptides, antibodies
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Pred. No. 1.
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RESULT 2222
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as grobes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2003
                                                                                                                                                                                                                                   primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                    Tumour suppression/reversion associated nucleotide
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04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                ADB44023 standard;
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                                                                                                                                                                                                                      diagnosis.
                                                                                                                                                                                                                                                             cytostatic;
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                                                                                                                 17-SEP-2002; 2002WO-IB004219
                                                                                                                                           15-MAY-2003.
                                                                                                                                                                     WO2003040369-A2
                                                                                                                                                                                               Homo sapiens
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                                    Telerman A, Amson R,
                                                                                        17-SEP-2001; 2001FR-00011981
                                                              (MOLE-)
            2003-441574/41
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                                                                                                                                                                                                                                                            antiviral; neuroprotective; nootropic; neuroleptic;
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                                                                                                                                                                                                                                                                                                                entry)
                                    Tuijnder M;
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Pred. No. 1.8e
0; Mismatches
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RESULT 2223
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro
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New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                   15-MAY-2003
                                                                                                                                                                                                                                                                      WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                    primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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04-DEC-2003
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(first entry)
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                                                                                                   Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human prostate membrane-specific antigen, of tumors and viral infection, also related
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Pred. No. 1.8e+03
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RESULT 2224
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 7 A; 7 C; 1 G; 2 T; 0 U; 0 Other;
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                                      userui e.g.
polypeptide
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04-DEC-2003
                                           New nucleic acid encoding human prostate membrane-specific ant useful e.g. for treatment of tumors and viral infection, also polypeptide and antibodies.
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                                                                                                                                                                                                                                                                                                                                                                                     primer; probe; tumour suppression; tu
virus resistance; transgenic animals;
                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression of the nucleotides.
                                                                                                            WPI; 2003-441574/41.
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(first entry)
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93.8%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                         tumour reversion; apoptosis;
ls; Alzheimer's disease; schi
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                                                                                                                                                                                                                                                                                                                                                                                          schizophrenia;
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Disclosure; Page 464; 771pp; French

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ADB40001
ADB XX
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CC Analysis of the expression of the nucleotides can be used for diagnosis can laso be used to screen for their specific interactive molecules.

CC potentially useful for treating diseases associated with abnormal
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                    New nucleic acid encoding huseful e.g. for treatment opolypeptide and antibodies.
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04-DEC-2003
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virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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at least 15
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                                                                                                                                                                                                                                                          human prostate membrane-specific antigen, of tumors and viral infection, also relat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
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The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, sequence having at least 80% identity, after optimal alignment, with t

otides, a with the

The invention relates to the isolation of 6327 nucleotide sequences, a fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting

detecting

Disclosure; Page 70; 771pp; French.

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CC or cell degeneration (e.g. Alzheimer's disease can be used for diagnosis of the expression of the nucleotides can be used for diagnosis of these diseases. The nucleotides and polypeptides can so be used to screen for their specific interactive molecules, contentially useful for treating diseases associated with abnormal
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                     useful e.g.
polypeptide
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                                                                                                                                                       New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
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Pred. No. 1.
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RESULT 2227
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Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal cexpression of the nucleotides.
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polypeptide a
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; 88; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                Disclosure; Page 399; 771pp;
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                    man prostate membrane-specific antigen,
tumors and viral infection, also related
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The invention relates to the isolation of 6327 nucleotide sequences, a fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies

Disclosure; Page 411;

771pp; French.

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RESULT 2228
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                                                                                                                                                                              useful e.g.
polypeptide
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virus resistance;
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04-DEC-2003
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                                                                                                                                                                                New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
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transgenic anima
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No. 1.8e+03;
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RESULT 2229
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               the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
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virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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                                                                                                                                                                                                                                                                                                     Page 412; 771pp; French.
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                                                                                                                                                                                                                                                                                                                                                              acid encoding for treatment
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 (e.g. Alzheimer's disease or
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of tumors
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.8e+03
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                The invention relates to the isolation of 6327 nucleotide sequences, of fragments of at least 10 consecutive nucleotides of these nucleotides, a consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, conditions are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro constant, and antisense sequences, of nucleotides involved in tumour consequences, of nucleotides involved and antiscally and to prepare transgenic animals, as suppression or reversion, approprise and or viral resistance, to produce experimental models. The nucleotides (also vectors containing them and containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours containing the vectors of iseases characterized by development of tumours containing the vectors of iseases can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
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virus resistance; transgenic
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se; transgenic animals; Alzheimer's disease; schi
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                                                    The invention relates to the isolation of 6327 nucleotide sequences, and consequence having at least 15 consecutive nucleotides of these nucleotides, a sequence that hybridizes under stringent conditions with the culleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, cleantifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour cultivates are used as probes or primers for detecting, consistency to proper and antisense sequences, of nucleotides involved in tumour cultivates and antisense sequences, of nucleotides involved in tumour cultivates and to prepare transgenic animals, as compression or reversion, apoptosis and to viral resistance, to produce crecembinant polypeptides, and to prepare transgenic animals, as containing the vectors), the encoded polypeptides and antibodies colls containing the vectors), the encoded polypeptides and antibodies colls containing the vectors), the encoded polypeptides and antibodies cor cells degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis containing these can be used for diagnosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules, contentially useful for treating diseases associated with abnormal
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polypeptide
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primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
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93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
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Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
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                                           The invention relates to the isolation of 6327 nucleotide sequences, and fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the curve clides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, cidentifying, quantifying and/or amplifying nucleic acids, as in vitro consistence, quantifying and/or amplifying nucleic acids, as in vitro consistence, quantifying and/or amplifying nucleic acids, as in vitro consistence, to produce recombinant polypeptides, and to prepare transgenic animals, as compression or reversion, apoptosis and or viral resistance, to produce capperimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies calls containing the polypeptide are useful for prevention and/or treatment containing the expression of the encoded polypeptides and antibodies can cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Containing the expression of the nucleotides can be used for diagnosis candor progness of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, appetion of the nucleotides and polypeptides can containly useful for treating diseases associated with abnormal
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic;
primer; prob
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 94; 771pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004219
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       virus resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2003-441574/41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probe;
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                                   of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiviral; neuroprotective; nootropic; neuroleptic; ss;
be; tumour suppression; tumour reversion; apoptosis;
tance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                   nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tuijnder
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Query Match

Sequence

17

BP; 4

A; 5 C; 4

G; 4 T; 0 U; 0 Other

Score 14.4;

DB 1;

Length 17;

Best Local Similarity

93.8%; Pred. No. 1.8e+03;

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ADB44035
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                                                    The invention relates to the isolation of 6327 nucleotide sequences, and consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the cumuleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro concesses and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and colls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis and observed the second of the nucleotides and polypeptides can be used to screen for their specific interactive molecules, the protection of the nucleotides and polypeptides can be captured to the protection of the nucleotides of of the nucleot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer; probe; tumour suppres
virus resistance; transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumour suppression/reversion associated nucleotide #4358
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BP;
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(first entry)
                                             the nucleotides
N
A;
7 C; 3
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G;
5
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0 U; 0 Other;
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Query Match Best Local S Matches 15

Similarity

1.5%;

Score 14.4; D Pred. No. 1.8e 0; Mismatches

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Length 17

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Gaps

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GTGCAGTGGCGTGATC

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RESULT 2234
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Query Match
Best Local S
Matches 15
                                                                                                   suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                         nucleotides. The nucleotides are used as probes or primers for deidentifying, quantifying and/or amplifying nucleic acids, as in sense and antisense sequences, of nucleotides involved in tumour
                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
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                                                                      Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 740; 771pp; French
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virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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1.5%;
nilarity 93.8%;
Conservative
                                                                      BP; 5 A; 7 C; 3 G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tuijnder M;
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Pred. No. 1
                                                                        2 T;
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                    .8e+03;
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                                                                                    Query Match
Best Local S
Matches 15
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                                                                                                                                                                                                                                   suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB45601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011981.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumour suppression/reversion associated nucleotide #5924.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                        Sequence
                                                                                                                                                                                                                     expression
                                          480
16
                                                                                      15;
                                                                                                           Similarity
                                                                                                                                                                           17
                                          GIGCAGIGGIGIGATC 495
                                                                                                                                                                                                                       0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid encoding human prostate membrane-specific antigen, for treatment of tumors and viral infection, also related and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 724;
                                                                                                                                                                           BP; 4 A;
                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                       the nucleotides.
                                                                                                       1.5%;
                                                                                                                                                                           7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M;
                                                                                      0
                                                                                    Score 14.4; D
Pred. No. 1.8e
0; Mismatches
                                                                                                           1.8e+03
                                                                                                                                DB 1;
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RESULT 2236 ADB45950/c ID ADB4595

ADB45950 standard; DNA; 17

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ADE30865/
ID ADE3
XX
AC ADE3
XX
DT 29-J
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                                                                                                                                                               RESULT 2237
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polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 765; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic
useful e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011981.
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  29-JAN-2004
                                                        ADE30865;
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                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                        654 GTGCAGTGGCGCAATC 669
                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                          standard; DNA;
                                                                                                                                                                                                                                              GTGCAGTGGCGCGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid encoding human prostate membrane-specific antigen, for treatment of tumors and viral infection, also relat
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and antibodies.
                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amson R,
     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; 8 C; 4 G;
                                                                                                                                                                                                                                                                                                                                                                            1.5%;
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                                                                                                                ВP
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Pred. No. 1.8e+03;
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neimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
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RESULT 2238
ADE30723/c
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Best Local S
Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     obesity; athersclerosis; diabetes mellitus; coronary artery heart disease; cholesterol homeostasis; ss; differntial expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polynucleotides differentially regulated in response to cholesterol and adipogenesis are useful to detect and treat associated conditions such obesity, athersclerosis, diabetes mellitus and coronary artery heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cholesterol homeostasis/adipogenesis related DNA seq id
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            adipogenesis
obesity, athe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression vector; anorectic; antiarteriosclerotic; antidiabetic; elevated cholesterol; elevated lipid; obesity; athersclerosis; diabetes mellitus;
                                                                                           obesity; athersclerosis; diabetes coronary artery heart disease; cho
                                                                                                                    expression vector; anorectic; antiarteriosclerotic; antidiabetic; elevated cholesterol; elevated lipid;
                                                                                                                                                                                                                                         ADE30723 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
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                          US2003180764-A1
                                                    Homo sapiens
                                                                              differntial expression.
                                                                                                                                                             Cholesterol
                                                                                                                                                                                        29-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                        GTGCAGTGGTGATC 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bowen
                                                                                                                                                             homeostasis/adipogenesis related
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 4 A;
                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                      7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     59pp;
                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                              Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                            cholesterol homeostasis; ss;
                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                         mellitus;
                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                            DNA
                                                                                                                                                            seq
                                                                                                                                                                                                                                                                                                                                                                                          Length 17;
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adipogenesis;
                                                                                                                   cardiant;
adipogenesis;
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RESULT 2239
ADH59597/c
ID ADH5959
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Best Local Similarity
Matches 15; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention describes a composition comprising at least one expression vector comprising a polynucleotide of the invention. The composition has anorectic, antiarteriosclerotic, cardiant and antidiabetic properties. The invention is used to detect and treat conditions associated with elevated cholesterol and lipid or during adipogenesis, particularly obesity, athersclerosis, diabetes mellitus or coronary artery heart disease. This sequence represents a polynucleotide differentially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polynucleotides differentially regulated in response to cholesterol addipogenesis are useful to detect and treat associated conditions supposity, athersclerosis, diabetes mellitus and coronary artery heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JAN-2003; 2003US-00339793.
                    Non-nucleotide probe for suppressing binding of detectable nucleic acid probes to undesired sequences, has aggregate nucleobase sequence homologous to randomly distributed repeat sequence of genomic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 8;
                                                                                                                                                                                                                                       WO2003027328-A2
                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                           Non-nucleotide probe of the invention #1.
                                                                                                                                                                                                                                                                                                                                                    25-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expressed during
                                                                                                Kirtsen
                                                                                                                                                           24-SEP-2001; 2001US-0324499P.
                                                                                                                                                                                      24-SEP-2002; 2002WO-US030573.
                                                                                                                                                                                                              03-APR-2003
                                                                                                                                                                                                                                                                                                    non-nucleotide
                                                                                                                                                                                                                                                                                                                                                                             ADH59597;
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                                                                                                                        (BOST-) BOSTON PROBES INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCGGGCTGAAGCGAT 2
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nilarity 93.8%;
Conservative
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                                                                                               Hyldig-Nielsen JJ,
                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                   probe; Bacterial Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cholesterol homeostasis and adipogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.4;
Pred. No. 1.
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                                                                                                 Williams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .8e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BB
                                                                                                                                                                                                                                                                                                     Chromosome
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                                                                                                                                                                                                                                                                                                     clone;
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Claim 10; SEQ ID

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3; 103pp; English.

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ADI49563
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC cell, and the sample is metaphase spreads, interphase nucleic cell, and the sample is metaphase spreads, interphase nucleic or nucleic crown in paraffin embedded tissue material or frozen tissue sections. The CC probe is also useful in comparing a sample of genomic nucleic acid with that of a control sample using a genomic nucleic acid reference array. CC metaphase in the sample control genomic nucleic acid, which are differentially labelled, the crontrol genomic nucleic acid and control genomic nucleic acid and the array with the mixture of the probe under suitable hybridization conditions, contacting the array with treated mixture of sample and control genomic nucleic acid and the array to that caused by hybridization of the probes to genomic nucleic acid, thus comparing the signals from the differential labels of the array to that caused by hybridization of the probes to genomic nucleic acid, thus compared with the relative copy numbers of sequences in the control sample as compared with the relative copy numbers of substantially claim is dequenced using an intercalating dye or a detectable antibody, or its fragment, that is specific for a nucleic acid/nucleic acid hybridization of the genomic nucleic acid to be tested and the reference of nucleic acid are labelled with detectable mothety such that hybridization of the genomic array is determined by determining the presence, absence, amount or location of the detectable mothety such that hybridization conduction of the genomic array is determined by determining the presence from the control array. The genomic array comprises nucleic acid that is prepared from CC arrays. The genomic array comprises nucleic acid that is prepared from CC arrays. The genomic array comprises nucleic acid that is prepared from CC arrays. The genomic array comprises nucleic acid that is prepared from CC arrays.
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents a non-nucleotide probe. The probe is useful for suppressing the binding of one or more detectable nucleic acid probes, that are greater than 100 base pairs and that have been derived from genomic nucleic acid, to one or more undesired sequences in an assay for determining target genomic nucleic acid of a sample. The method comprises contacting the sample with the mixture of probes (preferably comprising 5-50 probes), contacting the sample with the one or more detectable nucleic acid probes, and determining the target genomic nucleic acid of the sample by determining the hybridization of the one or more detectable nucleic acid probes to the target genomic nucleic acid of the sample by determining the hybridization of the card of the sample. The genomic nucleic acid is contained in a fixed tissue or a first the contact of the sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17
                                                                                                                                                                                                                                                         primer; PCR; gene (
cell degeneration;
                                                                                                                                                                                                                                                                                                             cytostati
                                                                                                                                                                                                                                                                                                                                   tumour suppression; tumour reversion; apoptosis; virus resistance;
                                                                                                                                                                                                                                                                                                                                                                                         Human tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                             15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADI49563 standard; DNA; 17
17-SEP-2001;
                                                    17-SEP-2002; 2002WO-IB004523
                                                                                                                                                      WO2003025177-A2
                                                                                                     27-MAR-2003
                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       882 AGCCACCACGCCGGC 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 AGCCACCGCGCCCGGC 2
                                                                                                                                                                                                                                                                                                          virucide; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 0 A; 5 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                 virucide; neuroprotective; nootropic; neuroleptic; probe;
gene chip; antisense; viral disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                         suppression/reversion-related DNA sequence SeqID2066.
2001FR-00011980
                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
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Indels

0; Gaps

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New isolated nucleic acid, useful for treating viral diseases associated

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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 2066; 30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tumour suppression; tumour reversion; apoptosis; virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-APR-2004
                                                WPI; 2003-313354/30.
                                                                                                                                                                                         17-SEP-2001; 2001FR-00011980.
                                                                                                                                                                                                                                           17-SEP-2002; 2002WO-IB004523
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI51563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI51563 standard; DNA; 17
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                                                                                           Telerman A,
                                                                                                                                                                                                                                                                                           27-MAR-2003
                                                                                                                                             (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ftp.wipo.int/pub/publishedpct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
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                                                                                           Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              suppression/reversion-related DNA sequence SeqID4066.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.5%;
                                                                                                Tuijnder M;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      resistance;
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RESULT 2242
AD147683/c
ID AD147683;
XX
AC AD147683;
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AC AD147683;
XX
PT 15-APR-2004 (first entry)
XX
DIST 15-APR-2004 (virucide; neuropic entry
XX
CYCOSTACT; virucide; neuropic entry
XX
CYCOSTACT; virucide; neuropic entry
XX
DIST 10-SEP-2002; virucide; neuropic entry
XX
DIST 17-SEP-2003.
XX
DIST 17-SEP-2003.
XX
DIST 17-SEP-2001; 2002WO-IB004523
XX
DIST 17-SEP-2001; 2001FR-00011980
XX
DIST 17-SEP-2001; 2002FR-00011980
XX
DIST 17-SEP-2002; 2002WO-IB004523
XX
DIST 17-SEP-2003; 2002WO-IB004523
XX
DIST 17-SE
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Best Local Sim:
Matches 15;
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             This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               with tumors and and transfected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprective; noctropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17
                                                                                                                                            Disclosure; SEQ ID NO 186; 30pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2002; 2002WO-IB004523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human tumour suppression/reversion-related DNA sequence SeqID186.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULAR ENGINES LAB
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                                                                                                                                                                                                                                                acid, useful for treating viral diseases associated degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                 Tuijnder
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No. 1
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RESULT 2243
ADI48354/c
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Best Local S
Matches 15
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This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                              Telerman
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primer; PCR; gene chip; antisense; viral disease; tumour;
cell degeneration; cancer; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human tumour suppression/reversion-related DNA sequence SeqID857.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             at ftp.wipo.int/pub/publishedpct_sequences
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                                                                                                                                                                                                                                Disclosure; SEQ ID
                                                                                                                                                                                                                                                                                                                                            WPI; 2003-313354/30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2001; 2001FR-00011980
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                              NO 857; 30pp; French
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Pred. No. 1.8e
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                                                                                           This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or camplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant conjugations of the invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, are characterised by development of tumours or cell degeneration. The greent sequence is that of a nucleic acid sequence of the invention.

CC Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO or tertion into intrinsical contents and compare sequence of the invention.
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO cert for wire intimity in the printed in electronic format directly from WIPO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease. Schirocher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADI52147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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   15-APR-2004
                                   ADI52737
                                                                    ADI52737 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                   Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 4650; 30pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011980.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and transfected
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                                                                                                                                                  16
                                                                                                                                                                                                                1 Similarity
15; Conserv
                                                                                                                                                                                   GTGCAGTGGTGATC 495
                                                                                                                                                  GTGCAGTGGCGTGATC
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amson R,
   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's disease; schizophrenia; ds; human
                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                 Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                Length 17
                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                  Gaps
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RESULT 2248
ADI49735
ID ADI4973
XX
AC ADI4973
XY
DT 15-APRXX
DE Human t
XX
KW tumour
KW tumour
KW cytosta
KW primer
KW cell de
XX

15-APR-2004

(first entry)

ADI49735 standard;

DNA;

17 ₿P

tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; hu

schizophrenia; ds; human.

suppression/reversion-related DNA sequence SeqID2238

degeneration;

S 밁

480 GTGCAGTGGTGATC 495

16

GTGCAGTGGTGCGATC

Best Matches

Local

Similarity

15;

Conservative

0

Mismatches

<u>,</u>

Gaps

0

Pred. No.

1.8e+03

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in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, september sequence is that of a nucleic acid sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO as for wino intention.
                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004523.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human tumour suppression/reversion-related
                                                                                                                  Sequence 17 BP; 4 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                     specification, but was obtained in electron
at ftp.wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 5240; 30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003025177-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to novel isolated nucleic acid sequences involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011980.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽,
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1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tuijnder M;
                                       Score 14.4;
                                           DB 1; Length 17;
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RESULT 2249
ADI51656
ID ADI5165
XX ADI5165
XX ADI5165
XX IS-APR-
XX IS-APR-
XX Luman t
XX Cumour
KW cumour
KW cumour
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KW cimor;
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XX Cell de
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PN WO20030
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-313354/30.
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                                                                                                                                                                      tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; nootropic; neuroleptic; proprimer; PCR; gene chip; antisense; viral disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to novel isolated nucleic acid sequences involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB
                   17-SEP-2002; 2002WO-IB004523.
                                                                                                                                                      primer; PCR; gene chip; cell degeneration; cance
                                                                                                                                                                                                                                                                            15-APR-2004
                                                                                                                                                                                                                                                                                                                                             ADI51656 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present
                                                       27-MAR-2003.
                                                                                       WO2003025177-A2
                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sent sequence is that of a nucleic acid sequence of the invention.

The sequence data for this patent did not form part of the printed scification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     869 GATTACAGGCGTGAGC 884
                                                                                                                                                                                                                                          tumour
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                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCACAGGCGTGAGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 2238; 30pp; French
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                          suppression/reversion-related DNA sequence
                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 4 C; 6
                                                                                                                                                          cancer; Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                BP
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Pred. No. 1.8e
0; Mismatches
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                                                                                                                                                          disease; schizophrenia; ds; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.8e+03;
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                                                                                                                                                                                                                                          SeqID4159
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                                                                                                                                                                                        probe;
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AD152090/
AD151
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C specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention.

C Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
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Best Local S
Matches 15
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                                   WPI; 2003-313354/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumour suppression; tumour reversion; apoptosis; virus resistance;
cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
primer; PCR; gene chip; antisense; viral disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human tumour
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                                                                                                                                                                                                                                                                           17-SEP-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          degeneration; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        492 GATCACAGCTCACTGC 507
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                                                                                                                                                              MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCTCAGCTCACTGC 16
                                                                                             P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 3 A; 7 C; 3 G; 4 T; 0 U;
                                                                                                                                                                                                                                                                                  2002WO-IB004523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     suppression/reversion-related DNA sequence SeqID4593
                                                                                             Amson
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                                                                                                Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's disease;
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Pred. No. 1.8e+03;
0; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention relates to novel isolated nucleic acid sequences involved in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cycostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of polypeptides. The invention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the printed specification, but was obtained in electronic format directly from WIPO at figure in the sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at figure in the publishedpct_sequences
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                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                 Disclosure; SEQ ID NO 2488; 30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
primer; PCR; gene chip; antisense; viral disease; tumour;
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                                                                                                                                                                2003-313354/30.
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Pred. No. 1.8e+03;
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in the phenomena of tumour suppression, tumour reversion, apoptosis This invention relates to novel isolated nucleic acid sequences involved

in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of polypeptides. The invention may therefore be useful for preparation of polypeptides.

prevention and/or treatment

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l for preparation of viral diseases that

This invention relates to novel isolated nucleic acid sequences involved

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RESULT 2252
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                                                                                                                                                                                                          New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                          WPI; 2003-313354/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; hu
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                                                                                                                                                                          Disclosure; SEQ ID NO 5291; 30pp; French
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                                                                                                                                                                                             in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, i vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
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                                                                                  specifically cancer but also Alzheimer's disease and schizophrenia present sequence is that of a nucleic acid sequence of the inventior Note: The sequence data for this patent did not form part of the prispecification, but was obtained in electronic format directly from w
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for treating viral diseases associated also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.8e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SeqID16.
                                                                                                                                                   invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probe;
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Sequence

17

BP;

2 A; 4 C;

8 G;

3 T;

0 U; 0 Other;

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945

CAGGCTGGAGTGCAAT

960

17

Best Loc Matches

15;

Conservative

<u>,,</u>

0;

Gaps

0

Local

Similarity

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RESULT 2254
AD150287/c
ID AD15028
XX AD15028
XX AD15028
XX THE AD1
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                                                                                                                                                                              This invention relates to novel isolated nucleic acid sequences involved component of tumour suppression, tumour reversion, apoptosis cand/or resistance to viruses. The invention may be useful for the compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as crosses and primers for detecting, indentifying, quantifying and/or camplifying nucleic acid, for example as one component of a gene chip, in component conditions and component of a gene chip, in component conditions are characterised by development of tumours or cell degeneration, considered by a nucleic acid sequence of the invention. The green the sequence of atta for this patent did not form part of the printed confidence is that of a nucleic acid sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 15
                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic;
primer; PCR;
cell degener
                                                                                                       Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 2790; 30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful with tumors and cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2001; 2001FR-00011980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tumour suppression; tumour reversion; apoptosis; virus resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADI50287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADI50287 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004523.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003025177-A2
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                                                                                                                                                            ftp.wipo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCGGCCTCAAGCGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCGGGCTCAAGCGAT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                virucide; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                          BP; 3 A; 7 C; 4 G; 3 T; 0
                                                                                                                                                            int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   suppression/reversion-related DNA sequence SeqID2790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chip; antisense; viral
; cancer; Alzheimer's d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                       1.5%;
93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.4;
Pred. No. 1
Score 14.4; DB 1; Length 17; Pred. No. 1.8e+03; O; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for treating viral diseases, also related polypeptides,
                                                                                                             U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nootropic; neuroleptic; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              schizophrenia; ds; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                     part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  associated
antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    involved
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RESULT 2256
ACC53368/c
ID ACC5336
XX ACC5336
XX ACC5336
XX 27-JUN-
DE Human t
XX Bs; tun
KW tumour
KW tumour
KW cellula
XX
OS Homo s;
XX
PN FR2826;
                                                                                                                                                                                                                                                                                                                                                       RESULT 2255
ADI20628
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                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to identifying an eRNA or a DNA sequence comprising an eRNA-encoding sequence in the nucleome of a eukaryotic cell comprises identifying non-protein-encoding nucleotide sequences within an mRNA transcript or a DNA sequence encoding same in the nucleome. The methods are useful for identifying an eRNA or DNA for modifying a genetic network in cell to alter the cells phenotype. The present sequence represents a putative eRNA sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ds; eRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI20628 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-SEP-2001; 2001US-0324127P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Putative eRNA sequence #37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADI20628
    FR2826373-A1
                          Homo sapiens
                                                  tumour regression; apocellular degeneration.
                                                                                                                                                                                  ACC53368 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                    Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying an eRNA or a DNA sequence comprising an eRNA-encoding sequence in the nucleome of a eukaryotic cell, comprising identifying protein-encoding nucleotide sequences within an mRNA transcript or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mattick J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-2002; 2002WO-AU001286
                                                                             ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
                                                                                                    Human tumour suppressor sequence #2135.
                                                                                                                                27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 14; SEQ ID NO 118; 137pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYQU ) UNIV QUEENSLAND
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                                                                                                                                                                                                                                                                          163
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                                                                                                                                                                                                                                                                                                  1 Similarity
15; Conserv
                                                                                                                                                                                                                                                                    TTTTGTATTTTTTTT 178
                                                                                                                                                                                                                                                  TTTTGAATTTTTTTT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gagen M,
                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                     BP; 2 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                               apoptosis; virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                             1.5%;
                                                                                                                                                                                                                                                                                                                                                    0 C; 1 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stanley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
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                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                 Pred. No. 1.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                              Score 14.4; DB 1;
Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ß
                                                                 resistance;
                                                                 diagnosis;
                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                  Gaps
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RESULT 2257
ACC54015
ID ACC5401
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid sequences associated with tumor suppression, apoptosis or virus resistance are useful to diagnose and treat disease, development of tumor cells and cell degeneration.
                    New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                           ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
tumour regression; apoptosis; virus resistance; diagnosis;
cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                 Human tumour suppressor sequence #2782.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 533;
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                                                                                                                                                           20-JUN-2001;
                                                                                                                                                                                     20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                27-DEC-2002.
                                                                                                                                                                                                                                         FR2826373-A1.
                                                                                                                                                                                                                                                                                                                                                                             27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                       ACC54015;
                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC54015 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                            WPI; 2003-250498/25.
                                                                                                      Tuijnder M,
                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCGGCCTCAAGCGAT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAGGCTCAAGCGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                      Telerman
                                                                                                                                                         2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             798pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.5%;
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                                                                                                       Amson
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Claim 1; Page 682; 798pp; French.

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                                                                                                                                 This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumour regression;
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                 ATCTTGGCTCACTGCA 682
                                                                                                                                                                                                                                                                           development of tumor cells
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Pred. No. 1.8e+03;
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Pred. No. 1.8e+03
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ACC53015
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human tumour suppressor sequence
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                                          tumour regression;
                                             ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis;
                                                                                                                           ACC53015;
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Homo sapiens

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         New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
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tumour regression; apoptosis; virus resistance; diagnosis;
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                                                                              with tumour suppression or regression, apoptosis or virus resist invention relates to these sequences or sequences having at lest identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. Invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degene
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                                                     Sequence 17
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                                                                                                                                                                                                                      s or virus resistance are useful development of tumor cells and o
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                                                                                                                                                                                                                          and cell degeneration.
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                                                                                  cells or cellular degeneration
                                                      0 Other;
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                            DB 1;
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                          Length 17;
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 Indels
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                                                                                                                                                      resistance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                      least
                                                                                                                                                                                                                                                     regression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
 Gaps
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837 GATCTGCCTGCCTCGG

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RESULT 2264
ADL50195
ID ADL5019
XX
AC ADL5019
XX
DT 20-MAY-
DY 20-MAY-
XX
DY 40-MAY-
XX
M 40-MAY-

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ACC52967/c
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid sequences associated with tumor suppression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-2001; 2001FR-00008139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC52967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                      prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB
                                                                               antisense oligonucleotide; neurite growth inhibitor; NOGO;
                                                                                                                        Human PKR substrate sequence #1309
                                                                                                                                                                                                      ADL50195;
                                                                                                                                                                                                                                         ADL50195 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence represents an isolated nucleic acid sequence associated
                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour suppressor sequence #1734
                                                                                                                                                                                                                                                                                                                                           17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     regression; apoptosis; virus resistance; diagnosis; ar degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17
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                                                                                                                                                                                                                                                                                                                                             CCCAAAGTGCTAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                    1.5%;
nilarity 93.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 3
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                                                                                                                                                              (first
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                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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      arthritis;
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RESULT 2265
ADL50217
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1X5X5X5X5X5X5X5X5
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CC that down regulate the expression or inhibit the function of a receptor

CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),

CC IRappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the

CC invention are useful for treating: cerebrovascular accident, central

CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,

CC ymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,

CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune

CC disease, lupus, multiple sclerosis, transplant/graft rejection,

CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The

CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The

CC culatic acids of the invention are also useful for down-regulating the

CC drifts and mutations within diseased cells or to detect the presence of a

CC culativate remuesce
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-APR-2001; 2001US-00827395.
29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      substrate; ds.
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                                                                                                                           Human PKR
                                                                                                                                                                      20-MAY-2004
                                                                                                                                                                                                               ADL50217;
                                                                                                                                                                                                                                                           ADL50217 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                               948
                                                                                                                                                                                                                                                                                                                                                                                                                                                           l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                    \vdash
                                                                                                                                                                                                                                                                                                                                                                                                               GCTGGAGTGCAATGGC 963
                                                                                                                                                                                                                                                                                                                                                                      GCUGGAGUGCAAUGAC 16
                                                                                                                           substrate sequence #1331.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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75.0%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
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antieonse outyvant antieonse outyvant antieonse outyvant prostaglandin D2 receptor; PTGDR; lkappan nervotein kinase PRR; cerebrovascular accident; protein kinase PRR; cerebrovascular accident; epinal ocentral nervous system injury; CNS injury; spinal ocentral nervous system injury; characteristics of the contral nervous system injury; contra

antisense oligonucleotide;

neurite growth inhibitor; NOGO; PTGDR; IkappaB kinase; IKK;

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a

cord injury; cancer;
rheumatoid arthritis;

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RESULT 2266
ADL49442
ID ADL4944
XX
AC ADL4944
XY
DT 20-MAY-
XX
DT 20-MAY-
XX
DT 20-MAY-
XX
DE Human P
XX
ENT Sen
KW antisen
KW prostag
KW prostag
KW protein
KW central
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention comprises nucleic acids (e.g. antisense oligonucleotides)

that down regulate the expression or inhibit the function of a receptor

for a neurite growth inhibitor, NGGO, prostaglandin Dz receptor (FTGDR),

KappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the

invention are useful for treating: cerebrovascular accident, central

cervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,

lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,

restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune

disease, lupus, multiple sclerosis, transplant/graft rejection,

ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic

conditions (e.g. asthma, allergic rhintis or atopic dermatitis). The

nucleic acids of the invention are also useful for down-regulating the

expression of a target gene and as a diagnostic tool to examine genetic

drifts and mutations within diseased cells or to detect the presence of a
                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord inj melanoma; lymphoma; glioma; inflammatory disease; rheumato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase oprotein kinase PKR genes, for treating cancer and inflammatory disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-APR-2001; 2001US-00827395.
29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       graft rejection; ischaemia
allergy; asthma; allergic
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                                                                                                                                      20-MAY-2004
                                                                                                                                                                                                         ADL49442 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC
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                                                                                                                                                                                                                                                                                                                                                          l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA in a cell. The
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                                                                                                       substrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence.
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                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         na; Crohn's disease; diabetes; obesity; se; lupus; multiple sclerosis; transplatits; sepsis; ischaemia; reperfusion; glomerulonephritis; sepsis; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO 3750; 317pp; English.
                                                                                                                                                                                                         RNA;
                                                                                                     sequence
                                                                                                                                      entry)
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75.0%;
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Pred. No. 1.8e+03;
                                                                                                       #556
                                                                                                                                                                                                                                                                                                                                                                                                                           0 T; 3
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                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RNA sequence represents
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                                                                                                                                                                                                                                                                                                                                                                                                                           ٦;
                                                                                                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                          Length 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammatory disease.
   cord injury; cancer;
rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fosnaugh
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RESULT 2267
ADL50746
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CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IRappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC restenosis or asthma), Crohn's disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis), The
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis) The
CC conditions of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC cunstrare securence
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid ar
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
in kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                            RNA;
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    y; cancer; arthritis;
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29-MAY-2001;
28-AUG-2001;
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                   Human PKR substrate sequence #538.
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.s; sepsis;
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      arthritis;
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Human PKR

substrate

sequence #545.

(first

entry)

ADL49431;

ADL49431 standard; RNA; 17

antisense oligonucleotide; neurite growth kinabito prostaglandin D2 receptor; PTGDR; IkappaB kinase; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal melanoma; lymphoma; glioma; inflammatory disease;

inhibitor; NOGO; kinase; IKK;

cord injury; cancer;
rheumatoid arthritis;

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678 CTGCAACCTCTGCCTC 693

CUGCAACUUCUGCCUC 16

Query Match Best Local Matches

Similarity

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Score 14.4; Pred. No. 1

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Length

.5%;

Conservative

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Mismatches

Indels

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Gaps

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Sequence 17

BP; 2

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that down regulate the expression or inhibit the function of a receptor (for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PMCDR), (I RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the cinvention are useful for treating; cerebrovascular accident, central crimery on the cerebrovascular accident, central crimery on the control injury, cancer (e.g. melanoma, I restenosis or asthma), crohn's disease (e.g. rheumatoid arthritis, cristenosis or asthma), crohn's disease, diabetes, obesity, autoimmune clientaese, lupus, multiple sclerosis, transplant/graft rejection, conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the capression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a carget RNA in a cell. The present RNA sequence represents a human PKR
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growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase
protein kinase PKR genes, for treating cancer and inflammatory diseas
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C that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obssity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, conditions (e.g. asthma, allergic rhintits or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target many cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the presence of a crifts and mutations within diseased cells or to detect the 
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allergy; asthma; allergic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       702
                                                                                                                                                                                                                                                                                                                                                                                           124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA in a cell. The
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTTATTCTCCTGCC 717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence.
                                                                                                                                        substrate
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                                                                                                                                                                                  (first entry)
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ischaemia; reperfusion; glomerulonephritis;
allergic rhinitis; atopic dermatitis; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NO 2964;
                                                                                                                                                                                                                                                                            RNA;
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                                                                                                                                      sequence
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                                                                                                                                        #555
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 T;
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    cord injury; cancer; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fosnaugh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rejection;
is; sepsis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2271
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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allergy; asthma;
antisense oligonucleotide; neurite growth inhibitor; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IK protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal comelanoma; lymphoma; glioma; inflammatory disease; rhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt L,
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 1 C; 2 G; 0 T; 11 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention comprises nucleic acids (e.g. antisense oligonu that down regulate the expression or inhibit the function of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 59; SEQ ID NO 2974; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein kinase PKR genes,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1066 CTAATTTTGTATTT 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        enzymatic nucleic acid that down-regulates expression of neurite h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or in kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 Other
                                  spinal cord injury;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense oligonucleotides)
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         rheumatoid
                                                                                                                              NOGO,
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            arthritis;
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RESULT 2272
ADL50425
ID ADL5042
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Best Local S
Matches 12
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29-MAY-2001;
28-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR), for a neurite growth inhibitor, NGGO, prostaglandin D2 receptor (PTGDR), invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, nulliple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of the conditions within diseased cells or to detect the presence of the presence of the conditions within diseased cells or to detect the presence of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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  protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                            antisense oligonucleotide; neurite growth inhibitor; NOGO;
prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                 ADL50425;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention comprises nucleic acids (e.g. antisense oligonucleotides) t down regulate the expression or inhibit the function of a receptor a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
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12; Conser
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                                                                                                                                                                                                                                                                                               standard;
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2001US-0294412P
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                                                                                                                                                   sequence #1539.
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          arthritis;
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RESULT 2273
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CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC (RappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC (Invention are useful for treating: cerebrovascular accident, central
CC (Invention are useful for treating: cerebrovascular accident, central
CC (Invention are useful for treating: cerebrovascular accident, central
CC (Invention are useful for treating: cerebrovascular accident, central
CC (Invention are useful for treating: cerebrovascular accident, central
CC (Invention are useful for the invention,
CC (Invention are older in the invention injury, glomearulonephritis, sepsis, and allergic
CC (Interestion of a target gene and as a diagnostic tool to examine genetic
CC (Interestion are also useful for down-regulating the
CC (Interestion are also useful for down-regulating a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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antisense oligonucleotide; neurite growth inhibitor; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IK protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal comelanoma; lymphoma; glioma; inflammatory disease; rhe
                                                                                                                                  Human PKR substrate sequence #566.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17
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                                                                                                                                                                                                                     ADL49452;
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12; Conserv
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                                                                                                                                                                                                                                                                  standard; RNA; 17
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75.0%;
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Pred. No. 1.8e+03
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    cord injury; rheumatoid ar
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arthritis;

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RESULT 2274
ADL49925
ID ADL4992
XX
AC ADL4992
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DT 20-MAY-
DY 20-MAY-
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DE Human F
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DE Human F
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Central
KW prostag
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Chat down regulate the expression or inhibit the function of a receptor (PTGDR),

Compared to the function of a receptor (PTGDR),

Compared to the function of a receptor (PTGDR),

Compared to the function are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, crestenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection,

Compression of asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target rans assumence.
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord inj melanoma; lymphoma; glioma; inflammatory disease; rheumato
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
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29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                      20-MAY-2004
                                                                                                                                                                                                     ADL49925
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12; Conserv
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                                                                                                                                                                                                    RNA; 17
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                                                                                                   sequence
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Pred. No. 1
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 cord injury; cancer;
rheumatoid arthritis;
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RESULT 2275
ADL50192
ID ADL5019
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AC ADL5019
XC ADL5019
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DT 20-MAY-
XX
DE Human P
XX
KW antisen
KW prostag
KW protein
KW central
KW melanom
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Best Local S
Matches 10
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury melanoma; lymphoma; glioma; inflammatory disease; rheumatoid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 59; SEQ ID NO 3458; 317pp; English.
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29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
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h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
in kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                               substrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence.
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                                                                                                             sequence
                                                                                                                                                  entry)
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                 BB
                 spinal cord injury;
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                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
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arthritis;

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RESULT 2276
ADL50735
ID ADL5073
XX
AC ADL5073
XX
DT 20-MAY-
XX
DT 20-MAY-
XX
DT Human P
XX
DE Human P
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W antisen
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Best Local
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29-MAY-2001;
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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PYGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        substrate sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-AUG-2001;
                                                                                                                                                                                                                                                       ADL50735 standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                               Human PKR substrate sequence #1849
                                                                                                                                                                                                                                                                                                                                                                                                   935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          enzymatic nucleic acid that down-regulates expression of neurite
h inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
in kinase PKR genes, for treating cancer and inflammatory disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Similarity
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                                                                                                                                                                                                                                                                                                                                                              CUCUGUUGCCCAGGCU 17
                                                                                                                                                                                                                                                                                                                                                                                                 CTCTGTTACCCAGGCT 950
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8P;
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2001US-0294412P.
2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
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C;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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        arthritis;
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        EXAXEXEXEXEXE
BXSXXXXX
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The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NGG, prostaglandin D2 receptor (PTGDR), IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, edisease, lupus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the
                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                      expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR
                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        substrate; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-058513/05
                                         substrate sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                 59; SEQ ID NO 4268; 317pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002WO-US010512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fosnaugh
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Sequence 17 BP; 3 A; v C; 4 <u>.</u> 0 T; 5 Ç, 0 Other;

D)

Matches Query Match Best Local 1 Similarity
10; Conserv Conservative 1.5%; 62.5%; 5. Score 14.4; Pred. No. 1 Pred. Mismatches ŏ. .8e+03 DB 1; Length 17; Indels 0 Gaps 0

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RESULT 2277
ADH17665/c
NOVX; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory;
                                                                                                                                                            11-MAR-2004
                                                                                                                                                                                                                                                    ADH17665 standard; DNA; 17
                                                                                                                  Forward
                                                                                                                                                                                                                                                                                                                                                                                                               665 CAATCTTGGCTCACTG
                                                                                                                                                                                                                                                                                                                                                                    N
                                                                                                                  PCR
                                                                                                                                                                                                                                                                                                                                                                    CAGUCUUGGCUCACUG
                                                                                                                  primer Ag6837 used to analyse human NOV expression.
                                                                                                                                                               (first entry)
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diabetes;

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The invention relates to a novel isolated NOVX polypeptide. The CC polypeptide of the invention demonstrates antidiabetic, anorectic, CC cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, CC antibacterial, fungicide, protozoacide, nootropic, neuroprotective, CC antiparkinsonian, anticonvulsant, osteopathic, antiarthritic, CC antiinflammatory, dermatological, antiasthmatic and antilipaemic CC activities. The polypeptides, nucleic acid molecules and antibodies may CC be useful in the manufacture of a medicament for treating metabolic CC disorders, diabetes, obesity, infectious diseases (viral, bacterial, CC disorders, diabetes, obesity, infectious diseases (viral, bacterial, CC disorders, and protozoal), anorexia, cancer, cardiovascular CC disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune CC disorders such as osteoarthritis, haemopoietic disorders, inflammatory skin disorders, asthma and various types of dyslipidaemia. The nucleic CC acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit neurogenesis, cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-038321IP.
02-UUI-2002; 2002US-039333P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402171P.
09-AUG-2002; 2002US-0402204P.
09-AUG-2002; 2002US-0405175P.
22-AUG-2002; 2002US-0405175P.
23-SEP-2002; 2002US-0415175P.
23-SEP-2002; 2002US-0415175P.
23-SEP-2002; 2002US-0415175P.
23-SEP-2002; 2002US-0416561P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kekuda R, Li
Peterson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   obesity; infection; anorexia; cancer; cardiovascular; hypertension; atherosclerosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoletic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopolesis; wound healing; angiogenesis; see therapy; chromosome mapping; tissue typing; pharmacogenomic; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example C; SEQ ID NO 355; 478pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fernandes ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alvarez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-) CURAGEN CORP.
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ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W;
Li L, Macdougall JR, Padigaru M, Patturajan M;
ID, Rastelli L, Shimkets RA, Spytek KA, Stone DJ;
I, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0384215P
2002US-0384296P
2002US-0384297P
2002US-0384327P
2002US-0384327P
2002US-0384352P
2002US-0385211P
2002US-0385213P
2002US-0393333P
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2002US-0384044P.
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RESULT 2278
AD135123/c
ID AD13512
XX
AC AD13512
XX
AC AD13512
XX
DT 22-APR-
XX
PLA2GIB
KW PLA2GIB
KW NON-ins
KW Myperte
KW Microal
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HOMO 88
OS HOMO 88
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W02004(
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PD 08-JAN-
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PF 27-JUN-
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PF 1 Adam G:
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                 The invention relates to diagnosing a predisposition to fat deposition leanness in a subject comprising detecting the presence or absence of polymorphic variation associated with fat deposition at a polymorphic site in a PLA2GIB nucleotide sequence in a nucleic acid sample from a subject, where the presence of the polymorphic variation indicates a predisposition to fat deposition in the subject. The polymorphic variation is a guanine at position 7328 or thymine at position 9182 of the present sequence. The method is useful for diagnosing a predisposition to fat deposition or leanness in a subject, and consequently for diagnosing a predisposition to non-insulin dependent diabetes mellitus (NIDDM) in a subject and conditions such as hyperinsulhatility. Cymitography minusia which cannot dyslipidemia, hypertension, glucose intolarance, dyslipidemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          angiogenesis, in gene therapy and the in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The nucleic acids may be further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine and pharmacogenomics. The current sequence is that of the human NOVX-related PCR primer which was used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diagnosing a predisposition to fat deposition or leanness, useful for diagnosing a predisposition to e.g. diabetes or hypertension, comprises detecting the presence of a polymorphism in the PLA2GIB nucleic acid from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3
   hypercoagulability, or microalbuminuria, which can lead to early prescription of preventive measures. Sequences ADI35114-ADI35129 represent PCR primers used for genotyping polymorphisms in a huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Adam GIR, Langdown ML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-JUN-2002; 2002US-0392361P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLA2G1B; fat deposition; leanness; single nucleotide polymorphism; non-insulin dependent diabetes mellitus; NIDDM; hyperinsulinemia; hypertension; glucose intolerance; dyslipidemia; hypercoagulability; microalbuminuria; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypertension; glu microalbuminuria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PLA2G1B gene polymorphism genotyping second PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADI35123;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENOM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      47; 91pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  fat deposition
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RESULT 2279
ADK96811
ID ADK96811
XX ADK9681
XX ADK9681
XX DF O6-MAY-
XX Human;
XX Claim 2
XX The pare ar
CC Human;
CC Genee ar
CC Dresent
XX Sequenc
RESULT 2280
ADK13208/c
ID ADK1320
XX ADK1320
XC ADK1320
DT 20-MAY-
XX Human 9
XX Glioma;
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PLA2G1B nucleotide
                                                                                                                                                                                                                                                                                               The present invention relates to a polynucleotide isolated from a hur gene and is useful for detecting a single nucleotide polymorphism in human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-MAR-2002; 2002JP-00064373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-2002; 2002JP-00064373
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADK96811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADK96811 standard; DNA; 17
 glioma; brain
                                                                                                                                                                                                                                                                                                                                                                                   Novel polynucleotide useful for PCR amplification along with two DNA fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-093977/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-SEP-2003
                                                                                                                                                                                                                                                             Sequence
                         Human glioma
                                                   20-MAY-2004
                                                                           ADK13208;
                                                                                                  ADK13208 standard;
                                                                                                                                                                                                                                                                                      present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                                                                                                                              Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
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15; Conserv
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                                                                                                                                                                                     CCACCATGCCCGGCTC 296
                                                                                                                                                                                                                                                             17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                             CCACCATGCCAGGCTC 17
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                            endothelial marker
                                                  (first entry)
 tissue; neoplastic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention
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                                                                                                   DNA; 17
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                                                                                                   aB.
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Pred. No. 1.
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                                                                                                                                                                                                               Mismatches
                           (GEM) long tag SEQ ID NO:386
  glioma endothelial marker; GEM;
                                                                                                                                                                                                                          .8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
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                                                                                                                                                                                                               Indels
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Diagnosing glioma by detecting expression product of any one of 255 genes, glioma endothelial markers, in brain tissue sample suspected of being neoplastic, and comparing the expression with expression in normal brain tissue sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           anticancer; antiglioma; immune response; cytostatic;
multi-drug sensitive glioma; human; long tag; ss.
                                                                                                                                                                                                                                                                                                                                                                            Madden SI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-AUG-2002; 2002US-0403390P-
01-APR-2003; 2003US-0458978P-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        multi-drug sensitive glioma; human;
                                                   of glioma.
                                                      The present invention describes a method (M1) of glioma. (M1) involves detecting an expressi
                                                                                                                                     Example
                                                                                                                                                                                                                                                                                                                         WPI; 2004-247973/23
                                                                                                                                                                                                                                                                                                                                                                                                                                (GENZ )
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                                                                                                                                                                                                                                                                                                                                                                                                                                GENZYME CORP.
ent invention describes a method (M1) for aiding in the diagnosis a. (M1) involves detecting an expression product of at least one in a first brain tissue sample (T) suspected of being ic, where (I) is chosen from any one of 255 genes (glioma
                                                                                                                                        SEQ ID NO 386; 114pp; English
                                                                                                                                                                                                                                                                                                                                                                          Wang CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                   JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                               Cook BP,
                                                                                                                                                                                                                                                                                                                                                                               Lattera J,
                                                                                                                                                                                                                                                                                                                                                                                  Walter
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CC neoplastic, where (1) is chosen from any one of 255 genes (glioma CC endothelial markers (GEMs)) as given in specification, and comparing the capression of (1) in (1) with expression of (1) in a second normal brain CC tissue sample (R), where increased expression of (1) in (T) relative to CC (R), identifies (T) as likely to be neoplastic. Also described: (1) cc antibody that specifically binds to a extracellular spitope; (2) cc identifying (M3) a test compound as potential anticancer or antiglioma (I), monitoring an expression product of the at least one gene and CC (I), monitoring an expression product of the at least one gene and CC identifying test compound as a potential anticancer drug if it decreases the expression of at least one gene; (3) identifying (M4) a test compound as a potential anticancer or antiglioma (CC identifying the test compound as a potential anticancer drug if it decreases the expression of at least one gene; (3) identifying (M4) a test compound CC identifying the test compound as a potential anticancer drug if it decreases the expression of at least one gene; and (4) inducing (M5) an immune response to glioma involves administering to a mammal, a protein (CC or (I). (I) have cytostatic activities, and can be used to trigger immune destruction of glioma cells, and as immune response inducers. (M1) is useful for aiding in diagnosing glioma. (M2) is useful for treating multication surgically removed. The present sequence represents a human GEM consider invention.
Query Match
Best Local S
Matches 15
                                                                                                                                        Sequence 17
                                                                                                                                                                                                                 invention.
                                                                                                                                               BP; 1
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                                 1.5%;
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       Score 14.4; I
Pred. No. 1.8e
0; Mismatches
                                                                                                                                               G; 5 T; 0
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                                                                         Length 17;
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RESULT 2281
ADJ10024/c
ID ADJ10024 standard; DNA; 17
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                                                                      AGCTGGGACTACAGGC 747
                                                         AGCTGGGACCACAGGC 2
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Conservative

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BXAXAXU
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ADN06450
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fat deposition. The present invention describes methods to detect the presence or absence of these single nucleotide polymorphisms of PLAZGIB, in particular G7328A and T9182G, and subsequently provide treatment that reduces fat deposition. This treatment may consist of an appetite suppressant, a lipase inhibitor, a phospholipase inhibitor, an exercise regimen, a dietary regimen, psychological counselling, psychotherapy or psychotherapeutic. Accordingly, PLAZGIB is a target for reducing fat deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and it can be used to treat both obesity and non-insuling deposition and the deposi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dependent diabetes mellitus (NIDDM), as well as cardiovascular disorders such as hypertension. As such, it exhibits antidabetic activity. This oligonucleotide sequence is a PCR primer used to amplify a region of interest (i.e. genotype SNPs) in human PLA2GIB DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to a novel candidate therapeutic agent useful for fat reduction and disorders related to fat depositions. Specifically, it refers to polymorphic variations in the phospholipase A2 (PLA2GIB) DNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Identifying a candidate therapeutic for fat reduction, useful treating diabetes, by introducing a test molecule to a system PLAJCHB protein or nucleic acid, and determining the presence interaction between the compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
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                                                      15-JUL-2004
                                                                                                         ADN06450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                fat reduction and disorders related to fat depositions. Specifically, it refers to polymorphic variations in the phospholipase A2 (PLA2G1B) DNA, which is located on chromosome 12q24 and has been associated with central
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-071944/07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    appetite suppressant; lipase inhibitor; exercise regimen; obesity;
non-insulin dependent diabetes mellitus; NIDDM; cardiovascular disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; PCR; ss; fat reduction; fat deposition; phospholipase A2; PLA2G1B
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                                                                                                                                                               ADN06450 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 72; 116pp; English
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1.5%;
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                                                                                                                                                                                                                                                                                                                                                     649
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 14.4;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U; 0 Other;
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Human FLAP related microsatellite marker SEQ ID NO:98.

Query Match

Sequence

17

BP; 4 A;

4 C; 6 G;

3 T; 0 U;

0 Other; DB 1;

Score 14.4;

Length 17;

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infarction in an individual who has at least one risk factor chosen from an at-risk haplotype for myocardial infarction, an at-risk haplotype for myocardial infarction, an at-risk haplotype in the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a FLAP nucleic acid and an at-risk polymorphism in the 5-lipoxygenase (5-LO) gene promoter; in an individual who has at least one risk factor chosen from diabetes, hypertension, hypercholesterolaemia, elevated Ip(a), obesity, past or current smoker; in an individual having elevated inflammatory marker chosen from C-reactive protein (CRP), serum amyloid A, fibrinogen, leukotriene, leukotriene metabolite, interleukin-6, tissue necrosis factor-alpha, soluble vascular cell adhesion molecule (sVCAM), soluble intervascular adhesion molecule (sICAM), E-selectin, matrix metalloprotease type-3, matrix metalloprotease type-3, matrix metalloprotease type-9, in an individual having increased low density improtease type-9; in an individual having increased low density improtease type-1, instructions in the selection increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-1 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased low density improtease type-2 in an individual having increased
individual having increased low density lipoprotein (LDL) cholesterol and/or decreased high density lipoprotein (HDL) cholesterol; in an individual having increased leukctriene synthesis; in an individual having previous myocardial infarction or acute coronary syndrome (ACS) event, stable angina; or in an individual who has atherosclerosis or who requires treatment to restore blood flow in arteries. (M1) is useful for treating an individual suffering from acute coronary syndrome chosen from unstable angina, non-ST-elevation myocardial infarction (NSTEMI) and ST-elevation myocardial infarction (STEMI). The human FLAP gene is located on chromosome 13, more specifically to 13q12. The present sequence represents a microsatellite marker used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acute coronary syndrome; antiatherosclerotic; cardiant; antianginal leukotriene biosynthesis inhibitor; leukotriene receptor antagonist 5-lipoxygenase activating protein; FLAP; human; chromosome 13; chromosome 13q12; polymorphism; 5-lipoxygenase gene promoter; 5-LO gene promoter; diabetes; hypertension; hypercholesterolaemia; obesity; inflammatory marker; low density lipoprotein; cholesterol;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        syndrome (ACS) in an individual comprising administering (I). (I) has antiatherosclerotic, cardiant and antiathoriant activities, and can be used as a leukotriene biosynthesis inhibitor, and a leukotriene receptor antagonist. (I) can be use for the manufacture of a medicament for the treatment of myocardial infarction or susceptibility to myocardial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Also
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Helgadottir A,
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21-FEB-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-357211/33.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DECO-) DECODE GENETICS
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Matches
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                                                                                                                                                                                                                                    The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of a Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human LOC338749 DNA which is located at
                                                                                                                                                                                                                                                                                                                                                                              Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for diagnosing, preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     breast cancer; cytostatic; chromosome 11p15.3; ss; PCF
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24-JUL-2003;
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  26-AUG-2004
                          ADP09403;
                                                                                                                                                                                                                            chromosomal
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                                                 standard;
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2003US-0490234P.
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  (first entry)
                                                                                                                                                                                                     A; 3 C; 7 G;
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                                                 DNA;
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                                                                                                                                                                   Score 14.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                           Roth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                breast cancer; cytostatic; chromosome 11p15.3; ss; PCI
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24-JUL-2003; 2003US-0490234P.
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                                                                                                      Sequence 17
                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                      (SEQU-)
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                          990 ccrccccccccrcaacc 1005
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  CCTCCTGGGCTCAAGC 17
                                                                                                                                                                                                                                                                                                                                                                                           Nelson MR,
                                                                                                                                                                                                                                                                                                             g a subject at risk of breast cancer by detecting the presence of one or more nucleotide polymorphic variations, useful for , preventing and/or treating breast cancer.
                                                                                                                                                                                                                                                                                    Page 110;
                                                                                                          BP; 3 A; 7 C; 4 G;
                                                      Conservative
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                                                                1.5%;
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Pred. No. 1.8e+03;
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                                                                              Length 17;
                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polymorphism
                                                        0
                                                        Gaps
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ADP08700/
                                                                                                                                                                                                   RESULT 2285
                                                                                 breast cancer; cytostatic; gene therapy; GP6; GPIV; GPVI; chromosome 19q13.4; ss; single nucleotide polymorphism.
                                                                                                                       Extend primer 37 used to genotype human glycoprotein VI polymorphism.
                                                                                                                                                             ADP08700;
                           10-JUN-2004.
                                              WO2004047767-A2
                                                                 Homo sapiens
                                                                                                                                           26-AUG-2004
                                                                                                                                                                                ADP08700
                                                                                                                                                                                standard; DNA; 17
                                                                                                                                           (first entry)
                                                                                                                                                                                 ВP
                                                                                             human; platelet glycoprotein PCR; primer; SNP;
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25-NOV-2003; 2003WO-US037966

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RESULT 2286
AAQ95849/c
ID AAQ9584
XX AAQ9584
XX AAQ9584
XX Primer
XX Primer
XX Primer
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XX Polymor
XX P
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV;GPVI) DNA which is located at chromosomal position 19q13.4.
                                                    Kit for automated genotyping contg. pairs of PCR primers - designed to amplify polymorphic nucleotide repeat sequences, arranged in sets each with a characteristic fluorescence label, useful e.g. in detection of disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer; polymerase chain reaction; PCR; linkage study; locus;
microsatellite marker sequence; automated genotyping; allele;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example
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                                                                                                                                                                                                                                                                                            VIND (OCYU)
                                                                                                                                                                                                                                                                                                                                                   03-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                       05-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9515400-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ95849 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        preventing and/or treating breast cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          set A)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence;
on; Homo s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for marker D6S344, chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Þ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
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                                                                 The method aims to provide a collection of highly reproducible microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The MMS are polymorphic, simple sequence repeats and can be used in automated genotyping. esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (ie. a difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 11 primer pairs are shown in AAQ95841-82. The published size range of the D6S344 allele is 13-15 bp, and the degree of heterozygosity in the population is
Sequence
  18
BP; 3
  A; 7 C; 4
  G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                           unique
                                                                                                                                                                                                                                                                                                                                               are
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Query Match Best Local S Matches 15 15; Similarity 1.5%; nilarity 93.8%; Conservative 0 Score 14.4; Pred. No. 1. Mismatches 1.9e+03 DB 1; Length 18; Indels ٥, Gaps

0

639 16 GTCACCCAGGCTGGAG GTGACCCAGGCTGGAG Ь 654

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RESULT 2287
AXX36673/c
ID AXX36673/c
ID AXX36677
XX
AC AAX36677
XX
DE PCR PT
XX
PCC PT
CCC AAX36673 standard; DNA; 18 PCR primer; detection; glaucoma allele; haplotype analysis; chromosome 2; chromosome 6; GLC6p25; haplotype profile; presymptomatic glaucoma; ss. Synthetic PCR primer 13-JUL-1999 sapiens. for marker D6S344. (first entry)

human;

GLC1B;

WO9916899-A2. 08-APR-1999.

(UYLA-) UNIV LAVAL

30-SEP-1997;

97CA-02217097 98WO-CA000924.

29-SEP-1998;

Raymond V, Morissette Ġ Falardeau P, Cote <u>ი</u> Anctil

WPI; 1999-263704/22

Haplotype analyses for indirect detection of glaucoma

Page 28; 41pp; English.

This sequence represents a PCR primer used in the method of the invention. The method is for detecting the presence of alleles for glaucoma comprising haplotype analysis of human chromosome 2 and 6 respectively, where the haplotypes are associated with loci GLC1B and GLC6p25 respectively. The primers are used to amplify gene sequences to generate information necessary to compile haplotype profiles. The haplotype profiles can be used to detect presymptomatic and symptomatic glaucoma. They can also be used to localise, isolate and identify the GLC1B and GLC6p25 loci so that detection of individuals with glaucoma is enhanced. The haplotype analyses also provide means for identification and following of mutant alleles in pedigrees or populations.

Disclosure;

Fig

7K-2; 104pp; English

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Best Local S
Matches 15
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                                                     The invention relates to a method for determining the ability of a cell to metabolise a drug. The method comprises using a detection primer complementary to a sequence 5' in relation to a point mutation of single-stranded DNA encoding a cytochrome P450 isoform, and detecting the hybridisation. Cytochrome P450 is group of enzymes located in the major route of phase I drug metabolism. The polymorphism of these enzymes results in the appearance of different phenotypes with differential capacities to metabolise drugs. The method allows for the detection of a mutation in a Cyp nucleotide sequence, where the mutation is known to affect the isoform's ability to metabolise a drug. The method is useful for measuring a patient's ability to metabolise a drug, specifically drugs which are metabolised by cytochrome P450 such as omegrazole, pentagrazole, phengytoin, verapamil, propanolol, tolbutamide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Primer; cytochrome P450; drug metabolism; omeprazole; pentaprazole; phenytoin; verapamil; propanolol; tolbutamide; S-warfarin; imiprami anti-malarial prodrug; proguanil; tricyclic anti-depressant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA09767
                                                                                                                                                                                                                                                                                                                             Determining the ability of cells to metabolize a drug using complementary to a target sequence immediately adjacent and relation to a defined point mutation of single-stranded DNA
                                                                                                                                                                                                                                                                                                                                                                                                                        Hauzenberger D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-AUG-1998;
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                                                                                                                                                                                                                                                                                   Disclosure; Page 23;
                                            omeprazole, pentaprazole, phenytoin, verapas-
s-warfarin, tricyclic antidepressants such
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SANG-) SANGTEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    639
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15; Conserv
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                                                                                                                                                                                                                                                                                                                  P450
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                                                                                                                                                                                                                                                                                   28pp; English.
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Pred. No. 1
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                                            as imipramin
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                                               and anti-malaria.
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15' in
encoding
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Query Match

Sequence

18

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5 C; 5 G; 1.5%;

0 U;

0 Other;

Score 14.4; 2 T;

DB 1;

Length

18;

Zmax1 gene region physical

map preparation

STS

marker #290

0

25-JAN-2002

(first

entry)

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RESULT 2289
AAF24965
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BXAXAXB
                                                                                   RESULT 2290
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                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                             Matches
                                                                                                                                                                                                                                                        PCR primers AAF24962-65 were used to amplify exon 12 of the human kritl gene. Kritl is a member of the Ras gene family. Mutations in the kritl gene are responsible for certain vascular abnormalities. The primers are used to detect mutations in the Kritl gene, specifically those mutations that are associated with presence of cavernomas, for diagnosis. The kritl gene, or its derivatives, are useful in gene therapy for controlling or its derivatives, are useful in gene therapy for controlling or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; krit1
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                                                              2331/c
ABA82331
                                                                                                                                                                                                                                                                                                                                                                     New primers for amplifying diagnosis, particularly by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vascular malformation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF24965;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF24965 standard;
                                                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                     inhibiting angiogenesis, e.g. in cases of vascular malformation dysplasia, or angioma, and the Kritl protein, optionally modifie
                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 16; 39pp; French.
                                                                                                                                                                                                                                                                                                                                                            therapy
                                                                                                                                                                                                                                                                                                                                                                                                                             Tournier LE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUL-1999;
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                                          ABA82331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (INRM ) INSERM
                                                                                                                                                                                                                           similarly,
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                                                                                                                  Н
                                                                                                                                                                       Similarity
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                                                                                                                                       GCTGGTCTCGAACTC
                                                              standard; DNA;
                                                                                                                  GGCTGGTCTTGAACTC 16
                                                                                                                                                                                                        ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene; Ras gene; cavernoma; gene therap
formation; dysplasia; angioma; tumour;
                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                            this gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  INST NAT SANTE &
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                                                                                                                                                                                                                          particularly for treatment of tumours
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amplify the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                        4 C;
                                                                                                                                                                       1.5%;
93.8%;
                                                                                                                                                                                                        6 G;
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                                                                                                                                                                                                                                                                                                                                                                       regions of the KritI detecting mutations,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.9e+03;
                                                                                                                                                                        Score 14.4;
Pred. No. 1
                                                                                                                                                                                                        6 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                               Labauge P;
                                                                                                                                                                      1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene therapy;
                                                                                                                                                                                                         0 Other;
                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                                                                     optionally modified,
                                                                                                                                                                                                                                                                                                                                                                        gene, useful for cavernomas, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exon
                                                                                                                                                                                  Length 18;
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                                                                                                                                                               Indels
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HI genes have osteopathic activities. The genes can be used in gene theral antisense therapy and in the production of vaccines. They can be used the diagnosis and treatment of bone disorders including osteoporosis, the diagnosis and treatment of bone disorders including osteoporosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; high bone mass; HBM gene; Zmaxl gene; chromosome 11; 11q13.3; sequence tagged site; STS; osteoporosis; osteopathic; gene therapy; antisense therapy, vaccine; bone disorder; Paget's disease; adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
                                                                                                                                                                                                                                            AAL49482
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                             Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia. ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-APR-2000; 2000US-00543771.
05-APR-2000; 2000US-00544398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-2000; 2000WO-US016951.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
               (ADNA-) ADNAGEN AG
                                   01-DEC-2000; 2000DE-01059776
                                                          01-DEC-2000; 2000DE-01059776
                                                                                18-JUL-2002
                                                                                                       DE10059776-A1
                                                                                                                            Homo sapiens
                                                                                                                                                                         Trisomy
                                                                                                                                                                                                 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New high bone
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15; Conserv
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                                                                                                                                                 21;
                                                                                                                                                                        21 diagnosis kit PCR primer PTR21S1412F.
                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                  GCTCAAGCAGTCCACC
                                                                                                                                                                                                                                                                                                   GCTCAAGCAGTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            bone
                                                                                                                                                   PCR;
                                                                                                                                                                                                                                                                                                                                                                                           BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 35; 443pp; English.
                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                 primer; prenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                           A; 4 C; 7
                                                                                                                                                                                                                                            DNA;
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                                                                                                                                                                                                                                                                                                                                                                                           G; 4 T; 0 U; 0 Other;
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zmax1
                                                                                                                                                                                                                                                                                                                                                                                                                                       bone disorders including osteoporosis, osteomalacia and fibrous dysplasia.
                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Johnson
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                                                                                                                                                                                                                                                                                                                                                                     DB 1;
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                                                                                                                                                    88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    proteins useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                     Length 18;
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RESULT 2292
ABK23128/c
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Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a diagnostic kit for detecting trisomy 21 in a human foetus, which comprises at least two pairs of oligonucleotide primers suitable for amplification, by polymerase chain reaction (PCR), of both strands of a target DNA sequence, i.e. a short tandem repeat region of human chromosome 21. The kit is used for prenatal, non-invasive diagnosis of trisomy 21. The present sequence is an oligonucleotide suitable for use in the kit of the invention
                                                                                                                                                                                                                                                                                                                                                                                                  Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke; lipid-associated condition; arteriosclerosls; cardiovascular disease; ss; osteoporosis; atherosclerosls; diabetic atherosclerosls; plaque build-up; neurovascular condition; wound healing; gene therapy; PCR primer; probe; bone development disorder; antiarteriosclerotic; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK23128 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 3 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
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                                                                                                                                                                                                                                                                                                         06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                        osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
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                                                                                                                                                                                                                                                                            25-MAY-2001; 2001WO-US016946.
                                                                                                                                                                                                                                                                                                                                   WO200192891-A2
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK23128;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCACTGCAACCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCACTGCAACCTCTG 689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                       cerebroprotective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reverse PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prenatal detection of trisomy amplification of short tandem
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             German.
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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The invention relates to a method for identifying a molecule involved in lipid regulation comprising identifying a molecule that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type

diagnosing, treating or preventing e.g., a identifying a molecule that binds to high corresponding wild type gene.

bone mass

gene e

comprises

Identifying molecules involved in lipid regulation, useful for diagnosing, treating or preventing e.g., arteriosclerosis, compared to the compared of the comp

Disclosure; Page 40; 409pp; English

WPI;

2002-097784/13.

Carulli

Little

₽,

Recker RR,

Johnson ML;

26-MAY-2000; 2000US-00578900.

GENOME THERAPEUTICS CORP.

CREIGHTON SCHOOL MEDICINE.

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RESULT 2293
ABZ10657/c
ID ABZ1065
XX ABZ1065
XX ABZ1065
XX Haematc
XX Human;
KW Gene th
KW Cytosil
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; naemare
dene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting disorders,
The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2001; 2001US-0278333P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Braun A, Distler J, Piepenbrock C, Adorjan Lipscher E, Maier S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rapy; lymphocytic leukaemia; acute myelogenous leukaemia; methylation state; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
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                                                                                                                                                                                                                                                                                                                            Page
                                                                                                                                                                                                                                                                                                                                                                                                       and differentiating between hematopoietic cell proliferative, comprises contacting a target nucleic acid with a reagent tlshes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lipscher E, |
, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                            55; 117pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cell proliferation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
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Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Guetig D, P, Grabs Model F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disorder related oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Howe A, Mu
G, Lesche F
Mueller V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mueller J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R, Leu E
Otto T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for treating,
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RESULT 2294
ACC45711/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cc represent specifically claimed nucleotide sequences from the present cc invention. Oligonucleotides from the present invention can be used; for differentiating between healthy haematopoietic cells and proliferative cd disorder haematopoietic cells; for differentiating between acute cc lymphocytic leukaemia and acute myelogenous leukaemia; as probes for determining the cytosine methylation state and/or single nucleotide coplymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation; gene therapy; bone density modulation; bone strength; trabecular number; bone size; bone tissue connectivity; bone disease; osteoporosis; PCR; osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
                                                                                                                                                                                                                                                                       11-MAY-2001; 2001US-0290071P.
17-MAY-2001; 2001US-0291311P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC45711 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
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                                                                                                         New transgenic animals (e.g. mice), useful as models for studying bone density modulation, developing drugs for treating or preventing bone diseases (e.g. osteoporosis), or diagnosing diseases characterized by
                                                                                                                                                                                                 Babij P,
                                                                                                                                                                                                                                                                                                                                                 13-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                             21-NOV-2002.
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                                                                                                                                                                                                                               (AMHP)
                                                                                                                                                                                                                                             (GENO-)
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                                                                                                                                                                                                                              GENOME WYETH.
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                                                                                                                                                                                                  Bex FJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry
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                                                                                                                                                                                                                                             THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; 1 C; 7
                                                                                                                                                                                                    Yaworsky PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        reverse primer #145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      improved and informed treatment
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                                                                                                                                                                                                                                              CORP.
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0; Mismatches
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                                                                                                                                                                                                    Bodine
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No. 1.9e+03;
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comprising an alteration an LRPS that is modulated

modulated

to novel transgenic animals expressing the high expressing the corresponding wild type HBM gene, expressing the corresponding wild type HBM gene, ion of the gene encoding LRP5 or LRP6, or expressing ated by an altered gene control sequence introduced

g the corresponding gene encoding LRP5 altered gene contro

The invention relates

Disclosure;

Page

56;

603pp;

English

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RESULT 2295
ADA26921/C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 15
The present invention describes a method of modulating type I muscle formation comprising contacting a cell with an agent that modulates PC modulated. Also described: (1) a method for identifying a compound capable of modulating type I muscle formation comprising contacting a cell with a compound, and determining whether PGC-1 alpha expression c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunomodulator; antidepressant; gene therapy;
aberrant type I muscle formation disorder; heart failure; disuse atrophy;
mitochondrial myopathy; systemic metabolic disorder; diabetes; obesity;
                                                                                                                                                                                                                                                                                                     modulating type I muscle formation or treating a disorder associated with aberrant type I muscle formation e.g. heart failure, diabetes or a mitochondrial myopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PGC-1 alpha promoter CRE sequence SEQ ID NO:15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
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                                                                                                                                                                                                                                                                                                                                                                                                                 Use of agents that modulate PGC-lalpha expression or activity, for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-689670/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Spiegelman BM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-FEB-2002; 2002US-0357069P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-FEB-2003; 2003WO-US004792
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          type I muscle formation; PGC-1 alpha; cardiant; antidiabetic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2003
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15; Conserv
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                                                                                                                                                                                                                                      Fig 1B; 114pp;
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                                                                                                                                                                                                                                      English.
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Pred. No. 1.9e+03;
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                                                                                                                                           modulates PGC-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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Use of agents that modulate PGC-lalpha expression or activity, for

WPI; 2003-689670/65

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RESULT 2296
ADA26920/c
ID ADA2692
CC comprising assaying the ability of the compound to modulate the cc expression or activity of PGC-1 alpha; (3) compounds identified by the CC expression or activity of PGC-1 alpha; (3) compounds identified by the CC method of (1) or (2); (4) a method for treating a subject having a CC disorder associated with aberrant type I muscle formation comprising CC administering to the subject an agent capable of modulating PGC-1 alpha according to the subject an agent CC expression or activity; (5) a method for increasing type I muscle CC expression or activity; (5) a method for increasing type I muscle CC expression or activity; (5) a method for increasing type I muscle CC expression or activity; (5) a method for increasing type I muscle CC expressed in the skeletal muscle of the animal. Expression or activity; and (6) a non-cc constitution of the skeletal muscle of the animal. Expression vectors and CC expressed in the skeletal muscle of the animal. Expression vectors and CC expressed in the skeletal muscle of the animal. Expression vectors and CC expression to the subject an agent capable of the animal expression vectors and CC expression the pGC-1 alpha polypeptides, are also described. PGC-1 alpha has cardiant, antidabetic, anorectic, immunomodulator and CC expression type I muscle formation or activity are useful for CC modulating type I muscle formation or treating a disorder associated with abertan type I muscle formation or treating adisorder such as CC diabetes, obesity, cachexia or anorexia. The PGC-1 alpha nucleic acid molecules, polypeptides, antibodies and modulators are useful in drug screening assays or in gene therapy. The transgenic animals are useful in the burner of the screening assays or in gene therapy. The transgenic animals are useful in the burner of the screening assays or in gene therapy. The transgenic screening as and the compounds that are convolved with type I muscle formation. The present sequence represents a in the compounds that are convolved with the screening as the procession of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                             imminomodulator; antidepressant; gene therapy; aberrant type I muscle formation disorder; heart failure; mitochondrial myopathy; systemic metabolic disorder; diabe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 4 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human PGC-1 alpha promoter CRE nucleotide sequence, exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activity is modulated; (2) a method for identifying a compound capable of treating a disorder associated with aberrant type I muscle formation
                                                                                                                                                                                                                                                                                                                               WO2003068944-A2
                                                                                                                                                                                                                                                                                                                                                                              Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA26920 standard; cDNA; 18
                                                                                     Spiegelman BM,
                                                                                                                                                                                   13-FEB-2002; 2002US-0357069F
                                                                                                                                                                                                                                                                                                                                                                                                                          cachexia; anorexia; mouse; promoter; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     type I muscle formation; PGC-1 alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse PGC-1 alpha promoter CRE sequence SEQ ID NO:14
                                                                                                                                                                                                                                  13-FEB-2003; 2003WO-US004792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1122 САЛАСТССТВАССТСА 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                       DANA FARBER CANCER INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                        Lin J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.5%;
93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.4; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ed. No. 1.9e+03
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cardiant; antidiabetic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disuse atrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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CC capable of modulating type I muscle formation comprising contacting a compound, and determining whether PGC-1 alpha expression or CC cativity is modulating type I muscle formation comprising a compound capable of treating a disorder associated with aberrant type I muscle formation or CC comprising assaying the ability of the compound identified by the CC method of (1) or (2); (4) a method for treating a subject having a CC disorder associated with aberrant type I muscle formation comprising a compound identified by the CC method of (1) or (2); (4) a method for treating a subject having a CC disorder associated with aberrant type I muscle formation comprising CC administering to the subject an agent capable of modulating PGC-1 alpha (CC expression or activity; (5) a method for increasing type I muscle formation in a subject comprising an exogenous PGC-1 alpha nucleic acid molecule, where the exogenous PGC-1 alpha nucleic acid molecule, where the exogenous PGC-1 alpha nucleic acid molecule; where the exogenous PGC-1 alpha nucleic acid molecule is CC expressed in the skeletal muscle of the animal. Expression vectors and CC expressed in the skeletal muscle of the animal. Expression vectors and cc cells comprising the PGC-1 alpha nucleic acids, and antibodies that specifically bind PGC-1 alpha polypeptides, are also described. PGC-1 alpha has cardiant, antidiabetic, anorecia, immunomodulator and continuous control of the approach of the animal. Expression vectors and condulating type I muscle formation or treating a disorder associated with aberrant type I muscle formation or treating a disorder associated with aberrant type I muscle formation. The present alpha nucleic acid conductors of the present sequence represents a mouse PGC-1 alpha promoter CRE nucleotide sequence, which is used in the excreening assays or in gene therapy. The transgenic animals are useful in cross-compounds that are converted in the present sequence represents a mouse PGC-1 alpha promoter CRE nucleotide sequence, which is used in the con
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                                                                                                                                                                                                                                                                                                                                                               RESULT 2297
ADB98409/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modulating type I muscle aberrant type I muscle mitochondrial myopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method of modulating type I musciformation comprising contacting a cell with an agent that modulates alpha expression or activity, so that type I muscle formation is modulated. Also described: (1) a method for identifying a compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18
          13-MAY-2002; 2002WO-US014877.
                                                                                                                                                                                      Osteopathic;
                                                                                                                                                                                                                          Sequence tagged
                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                           ADB98409;
                                                                                                                                                                                                                                                                                                                                               ADB98409
                                                          21-NOV-2002.
                                                                                              WO200292000-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1122
                                                                                                                                                                        mass modulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAACTCCTGACCTCA 1137
                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAACTCCTGACGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fig 1B; 114pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                        Gene therapy; High Bone Mass; HBM; LRP5;
                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   I muscle formation
                                                                                                                                                                                                                              site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 muscle formation or treating a disorder associated with uscle formation e.g. heart failure, diabetes or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 C; 7
                                                                                                                                                                                                                              #290 used
                                                                                                                                                                        osteoporosis;
                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.4; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                            to prepare Zmax1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ed. No. 1.9e+03;
Mismatches 1
                                                                                                                                                                        STS;
                                                                                                                                                                        sequence tagged site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7:
                                                                                                                                                                                                                                (LRP5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                            Zmax1; LRP6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     type I muscle
hat modulates
                                                                                                                                                                                                                                gene region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PGC-1
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DEXX PRESENTATION OF STREET PRESENTATION OF S
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ACA58053/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and LRP6 mutants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence is a Sequence Tagged Site (STS) marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid comprising a mutation in LRP5 or diagnosing a HBM-like phenotype in a subject and composition for modulating bone mass and/or lipid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAY-2001; 2001US-0290071P.
17-MAY-2001; 2001US-0291311P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AMHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; genotype determination; familial bipolar affective disorder; chromosomal region linked; locus associated with resistance; D4S402 D4S424; D4S431; D4S404; D11S394; D11S29; chromosome marker; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           suffering from e.g. osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-129214/12
                                                                                                                                                                                                           29-MAR-1996;
20-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human familial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACA58053 standard; DNA; 18
                                                 Ginns
                                                                                                                                                                                                                                                                                  13-JUN-2001; 2001US-00881012
                                                                                                                                                                                                                                                                                                                                 19-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                US2002192655-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACA58053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENO-)
                                                                                          (GINN/) GINNS E I.
(EGEL/) EGELAND J A.
(PAUL/) PAUL S M.
                                                                                                                                                                                        19-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>×
                                              EI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENOME WYETH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTCAAGCAGTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCAAGCAGTCCACC 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anisowicz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 63; 629pp; English.
                                              Egeland JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                        96US-0014334P.
97US-0062924P.
98US-00175158.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bipolar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 C; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        affective disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Graham
                                                   Paul SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G; 4 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>0</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.4; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morales
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chromsome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P5 or LRP6, useful and for preparing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yaworsky
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for preparing levels in a s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     덩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D4S402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Liu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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WPI; 2003-352708/33

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method of determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder. The method comprises determining the genotype with at Cleast one marker of at least one chromosomal region linked to a locus associated with resistance to bipolar affective disorder, where the chromosomal regions are included of and localised between D45402 and CC chromosomal regions are included of and localised between D45402 and CC discloses a kit for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder, where the kit comprises markers for two or more of the chromosomal regions cited. The method and kit are useful for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder cin a family affected by bipolar affective disorder, for determining the CC contribution of these chromosomal regions to bipolar affective disorder in a affective family member, and for assessing an increased or decreased risk of developing bipolar illness for a tested individual from an affective family. ACA58053-ACA58292 represent primers used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family comprises determining the genotype of e.g., chromosomal regions D4S402 and D4S424.
               New isolated polynucleotides comprising single nucleotide polymorphisms of the cardiovascular gene, useful for assessing predisposition or susceptibility to a cardiovascular disease, e.g. atherosclerosis, restenosis or stroke.
                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; cardiovascular associated gene; allelic variation; atherosclerosis; ischemia; reperfusion; hypertens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 8; 79pp; English.
                                                                                                                                           Stropp
                                                                                                                                                                                                                 08-JAN-2002; 2002EP-00000153
                                                                                                                                                                                                                                                     07-JAN-2003; 2003WO-EP000060
                                                                                                                                                                                                                                                                                           17-JUL-2003
                                                                                                                                                                                                                                                                                                                             WO2003057911-A2
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP-containing cardiovascular associated gene primer #162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADM92832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADM92832 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present invention
                                                                                                                                                                               (FARB ) BAYER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
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15; Conserv
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                                                                                                                                           Schwers S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                    atherosclerosis; ischemia; al inflammation; myocardial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7 C; 4 G; 4 T; 0
                                                                                                                                           Kallabis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.4; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                  reperfusion; hypertension; infarction; stroke; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates an isolated polynucleotide (I) encoded by a cardiovascular associated (CA) gene, having allelic variation contained in a functional surrounding like full length cDNA for CA gene polypeptide, and with or without the CA gene promoter sequence. (I) is a polynucleotide comprising single nucleotide polymorphisms predicting cardiovascular disease. The polynucleotides are useful for assessing predisposition or susceptibility to a cardiovascular disease, e.g. atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial inflammation, myocardial infarction, and stroke. These may also be used to predict personal medication schemes omitting adverse drug reactions, or as probes for detecting genetic polymorphisms and as templates for the recombinant production of normal or variant peptides/polypeptides encoded by the genes. This sequence corresponds to a PCR primer to amplify one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             leukotriene biosynthesis inhibitor; leukotriene receptor antagonist; 5-lipoxygenase activating protein; FLAP; human; chromosome 13; chromosome 13q12; polymorphism; 5-lipoxygenase gene promoter; 5-LO gene promoter; diabetes; hypertension; hypercholesterolaemia; obesity; inflammatory marker; low density lipoprotein; cholesterol; obesity; inflammatory marker; low density lipoprotein; cholesterol;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      by the genes. This sequence the genes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 72; 187pp; English.
                                                                                                              Use of leukotriene synthesis for treatment for myocardial infarction in individual.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human FLAP related microsatellite marker SEQ ID NO:234.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADN06584;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADN06584 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                   17-OCT-2002; 2002US-0419433P.
21-FEB-2003; 2003US-0449331P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004035741-A2
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                                                                                                                                                                                                                                                                                                 Helgadottir A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-OCT-2003; 2003WO-US032556.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       scute coronary syndrome; antiatherosclerotic; cardiant; antianginal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      leukotriene synthesis inhibitor; myocardial infarction;
                                                                                                                                                                                                                                      2004-357211/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           density
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     387 CCAAAGTGCTGGGATT 402
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                                                                                                                                                                                                                                                                                                                                                            DECODE GENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 4 A; 2 C; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lipoprotein; angina;
                                                                                                                                                                                                                                                                                                 Gurney ME, Gulcher JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                inhibitor for infarction or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           density lipoprotein; cholesterol atherosclerosis; microsatellite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  u; o
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                                                                                                                                                manufacture of susceptibility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
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                                                                                                                                                t a
                                                                                                                                                medicament
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The present invention describes using a leukotriene synthesis inhibitor

Disclosure;

SEQ ID NO 234; 306pp; English.

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CC treatment of myocardial infarction or susceptibility to myocardial confidence of myocardial infarction or susceptibility to myocardial confidence on an at-risk haplotype for myocardial infarction, an at-risk haplotype in the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a confidence of myocardial infarction, an at-risk haplotype in the 5-lipoxygenase activating protein (FLAP) gene, a polymorphism in a confidence of myocardial myocardial who has at least one risk factor confidence of myocardial myocardial min the 5-lipoxygenase (5-lipoxygenase (5-lipoxygenase of myocardial myocardial infarction or risk factor confidence of myocardial myocardi
뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2301
AD056531/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human cyclin-dependent kinase 10, CDK10 proximal SNP
                                                                                                                                                                                           06-NOV-2003; 2003WO-US035879
                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy; human; ss; melanoma; •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO56531 standard;
Roth RB,
                                                                                                             06-NOV-2002;
23-JUL-2003;
                                                                                                                                                                                                                                                  27-MAY-2004
                                                                                                                                                                                                                                                                                                   WO2004044164-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                           melanoma associated
                                                      (SEQU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282 CACCATGCCCGGCTCT 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 l Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CACCATGCCTGGCTCT 16
                                                      SEQUENOM INC
Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 2
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                                                                                                          2002US-0424475P
2003US-0489703P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                              polymorphism; cyclin-dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                           polymorphic variation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 C; 3
Braun A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
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Pred. No. 1.
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     Kammerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.9e+03;
     SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                    kinase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            probe
                                                                                                                                                                                                                                                                                                                                                                                                                    10; CDK10;
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                                                                                                                                                                                                                                                                                                                                                                                                                    probe
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RESULT 2302
AD056506/c
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a method of identifying a subject at risk of melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence represents a human cyclin-dependent kinase 10, CDK10, proximal SNP probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-411721/38.
                                                                     Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                             Human cyclin-dependent kinase 10, CDK10 proximal SNP probe #31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 84; 295pp; English.
                                                                                                                                WPI; 2004-411721/38.
                                                                                                                                                                                                                     06-NOV-2002;
23-JUL-2003;
                                                                                                                                                                                                                                                              06-NOV-2003; 2003WO-US035879
                                                                                                                                                                                                                                                                                                                           WO2004044164-A2
                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                    single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                   gene therapy; human; ss; melanoma; melanoma associated polymorphic va
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AD056506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO56506 standard; DNA; 18
                                                                                                                                                          Roth RB,
                                                                                                                                                                                                                                                                                               27-MAY-2004
                                                                                                                                                                                         (SEQU-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1092 GGGGTTTCACCATATT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
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                                                                                                                                                           Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                     2002US-0424475P
2003US-0489703P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; 6 C; 3
                                                                                                                                                                                                                                                                                                                                                                                    polymorphism; cyclin-dependent kinase 10; CDK10; probe
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93.8%;
                                                                                                                                                             Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 2 T; 0 U; 1 Other;
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0; Mismatches
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                                                                                                                                                               Kammerer SM,
                                                                                                                                                                                                                                                                                                                                                                                                     variation; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.9e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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The invention relates to

a method of identifying a subject at risk of

Example 5; Page 84; 295pp; English

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RESULT 2303
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ID ADDS6555
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KW melanon
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Best Local S
Matches 15
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from a subject. Preventing melanoma in a subject comprises detecting the presence or absence of one or more polymorphic variations associated we melanoma in a nucleic acid sample from a subject; and administering a melanoma preventative to a subject in need thereof based upon the presence or absence of the one or more polymorphic variations in the nucleic acid sample. The preventative reduces ultraviolet (UV) light exposure to the subject. The methods, nucleic acids, proteins, and compositions are useful for treating melanoma. The present sequence represents a human cyclin-dependent kinase 10, CDK10, proximal SNP processing and compositions are useful for treating melanoma.
                                                                                                                                                                                                                                                                                                                         The invention relates to a method of identifying a subject at risk of melanoma comprising detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Identifying a subject at risk of melanoma, useful for treating melanoma, comprises detecting the presence or absence of one or more polymorphic variations associated with melanoma in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-NOV-2002; 2002US-0424475P.
23-JUL-2003; 2003US-0489703P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene therapy; human; ss; melanoma; melanoma associated polymorphic va
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human cyclin-dependent kinase 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-AUG-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2004-411721/38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>ა</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 3 A; 3 C; 8 G; 3 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polymorphism; cyclin-dependent kinase 10; CDK10; probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.5%;
93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polymorphic
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Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         variation; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDK10 proximal SNP probe #81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SX.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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probe

Query Match
Best Local Similarity
Matches 15; Conserv

Conservative

93.8%;

Pred. No. 1.96 0; Mismatches

.9e+03

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Sequence 18 BP;

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RESULT 2304
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                                               of breast cancer comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cytostatic applications and may be useful for identifying a subject at risk of breast cancer, for early diagnosis, prevention and treatment of breast cancer, possibly via gene therapy, as well as to analyse and predict a response to a breast cancer treatment and in clinical drug trials. The current sequence is that of an Extend primer (also described as probe) of the invention which was used to genotype human intercellular adhesion molecule ICAM-1/ICAM-4/ICAM-5 gDNA. ICAM-1 (human rhinovirus receptor;BB2 C,CD54;cell surface glycoprotein p3.58) has been mapped to chromosomal position 19p13.2-cen and ICAM-5 (telencephalin) has been mapped to chromosomal position 19p13.2-cen and ICAM-5 (telencephalin) has been mapped to chromosomal position 19p13.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           breast cancer; cytostatic; gene therapy; numan; intercellular adhesion molecule; ICAM-1; human rhinovirus receptor; BB2; CD54; cell surface glycoprotein P3.58; ICAM-4; Landsteiner-Wiener blood group; ICAM-5; telencephalin; chromosome 19p13; car primer; PCR; SNP; single nucleotide polymorphism; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE regions which are associated with breast cancer in a nucleic acid sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-441051/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Extend primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 4; Page 83; 289pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-NOV-2003; 2003WO-US037948
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-JUL-2003;
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       subject.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0429136P.
2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  relates to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a novel method for identifying a subject at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .9e+03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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RESULT 2305
AAH91142
ID AAH9114
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AAV39596/c
ID AAV395
XX
AC AAV395
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                                                 RESULT 2306
                                                                                                                                               Query Match
Best Local
                                                                                                                                     Matches
                                                                                                                                                                                                      The present invention describes a method for detecting the presence of polymorphisms associated with inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. The methods can be used to detect the presence of genetic polymorphisms associated with inflammatory bowel disease and correlating their occurrence with disease states. They may used in this way for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis. The present sequence is a polymorphic site described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH91142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH91142 standard;
                                                                                                                                                                                                                                                                                                                                              Testing for the presence of polymorphisms associated with bowel disease, using a hybridization assay.
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-367874/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-DEC-1999; 99US-0170257P.
10-APR-2000; 2000US-0196046P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2000; 2000WO-US033632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200142511-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human inflammatory bowel disease associated polymorphic
                                                                                                                                                                                                                                                                                                                        Claim 1; Page 48; 463pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                  (WHED )
                                                                                                                                                                                   Sequence 36 BP; 5
                          AAV39596 standard; cDNA; 14
                                                                                                            1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   732
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammatory bowel disease; Crohn's disease; ulcerative colitis; nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 WHITEHEAD INST BIOMEDICAL ELLIPSIS BIOTHERAPEUTICS
                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTGGGACTACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                           Hudson TJ,
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                                                                                                              AGCTGGGATTACGGGCACCTGCCACCACACCCCGCT 1067
                                                                                       AGCCGGGCGTGGTGGCAGNTGCCTGTAATCCCAGCT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5q31-33; forensic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                   A;
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                                                                                                                                               1.4%;
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                                                                                                                                                                                   10 C; 13 G; 7
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"SNP, optionally G or T at this position"
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                          ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sm; SNP; chromosome 19p13; paternity test; test; gene therapy; ds.
                                                                                                                                   Score 14.2; DB 1;
Pred. No. 2.3e+03;
0; Mismatches 14;
                                                                                                                                                                                                                                                                                                                                                                                                             Rioux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                     CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                RES.
                                                                                                                                                                                   T; 0 U; 1 Other;
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                                                                                                                                      14;
                                                                                                                                                            Length 36;
                                                                                                                                      Indels
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                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                          detect
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AAV39596;

RESULT 2307 AAA23392 ID, AAA2339

AAA23392 standard; RNA; 14

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                                                                                                                                      CC A process has been developed for determining the sequence of a target culleic acid. The process comprises: (i) generating at least two CC fragments (F) from the target nucleic acid; and (ii) analysing F by mass CC spectrometry (MS). The sequences in AAV39483 to AAV39592 are specifically CC claimed primers for use in the mass spectrometric analysis of the above CC process. The process is used to detect genetic diseases (e.g. CC diseases, cystic fibrosis and many others) or chromosomal abnormalities CC diseases, cystic fibrosis and many others) or chromosomal abnormalities CC (or predisposition); infections and cancers; also for establishing CC identity and heredity. Particular applications are diagnosts of CC neuroblastoma, detecting telomerase, determining family relationships and CC methods using MS, this process requires fewer specific reagents and is better suited to automation. Extended primers are shorter; primer CC annealing is more efficient and the process allows detection of many CC conjacucleotide used in an example from the present invention
                                                       Query Match
Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-1996;
06-NOV-1996;
06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mass spectrometry; diagnosis; detection; l
genetic disease; chromosomal abnormality;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequencing nucleic acid by mass spectrometric analysis - for detec
nucleic acids, telomerase activity, oncogene mutations, or cancer-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-NOV-1996;
23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pathogenic organism; telomerase activity; oncogene mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Microsatellite analysis detection primer SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Braun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Koster H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-OCT-1997;
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19-SEP-1997;
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                                                                                                               Sequence 14
                                                                                                                                                                                                                                                                                                                                                                                                              Example 11; Page 130; 478pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          specific sequences, for diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-286975/25.
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                   620 GAGACAGAGTCTCA 633
 14
                                                                        Similarity
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Damhoffer-Demar
                                                                                                                 BP;
                                                       1.4%; Score 14; llarity 100.0%; Pred. No. Conservative 0; Mismatc
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97US-00787639.
97US-00933792.
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96US-00744590.
96US-00746036.
96US-00746055.
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                                                                                                                 P
                                                                                                                 4 C;
                                                                                                                  3
G;
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B, Jurinke C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              detection; biological sample; infection;
abnormality; identification; heredity;
                                                                                                                  5 T; 0 U; 0 Other;
                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                disease.
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                                                                        DB 1; Li
1.7e+03;
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                                                                                     Length 14;
                                                             Indels
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Boom D, X
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                                                          Gaps
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AAA23392;

19-JUN-2000

(first entry)

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                                                                                                          Query Match
Best Local (
                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozy hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
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                                                                                                                                                                                  Sequence 14 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 54; Page 276; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-MAR-1999;
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                                           535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ribozymes for modulating the synthesis, expression and/or stability mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PA,
                                                                                         11;
                                                                                                              Similarity
cuccueccucaecc 14
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                                                                                                                                                                                                                                subunit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention describes enzymatic nucleic acid molecules with RNP
                                                                                         Conservative
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                                                                                                                                                                                1 A;
                                                                                                                                                                                                                             alpha-6,
                                                                                                            1.4%;
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C;
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                                                                                                            Score 14;
Pred. No.
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                                                                                                                                                                                0 T; 3 U; 0 Other;
                                                                                         Mismatches
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                                                                                                                                                                                                                             subunit beta-3
                                                                                                                                       BG
                                                                                                            .7e+03;
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                                                                                                                                  Length 14;
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                                                                                         Indels
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                                                                                      Gaps
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Query Match Best Local Similarity

1.4%;
71.4%;

Score 14; Pred. No.

1.7e+03; DB 1;

Length 14;

of f

Sequence 14

BP; 1 A; 6 C; 3 G; 0 T; 4 U; 0 Other

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RESULT 2308
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cgene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CAAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA18385 and AAA19087 to Corresponding target sequences; AAA17685 to AAA18385 and AAA19086 and AAA19144 represent ribozyme sequences for Tie-2, and AAA19386 to AAA19086 and AAA19122 represent their corresponding target sequences; AAA19123 to AAA20361 and AAA21591 to AAA21595 represent tribozyme csequences for integrin alpha 6 subunit, and AAA20362 to AAA1500 and AAA21595 to AAA21689 to AAA21689 to AAA22475 and AAA2363 to AAA2363, AAA2364, AAA2365, AAA2367 savesent their corresponding target sequences; AAA21689 to AAA22475 and AAA2363 to AAA2366, AAA2366, AAA2367 savesent their corresponding target sequences; AAA21689 to AAA22475 and AAA2363 to AAA2366, AAA2366, AAA2367 savesent their corresponding target sequences; AAA21689 to AAA22475 and AAA2366 to AAA2366, AAA2366, AAA2367 savesent their corresponding target sequences;
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                           AAA23422 represent their corresponding target sequences. The ribozymes (the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as mecvascular glaucoma, myopic dependantion, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of an mRNA encoding an angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-591315/50
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-JUN-2000
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CC cleaving activity, which specifically cleave KNA encoueu by an art. CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17685 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18335 and AAA18387 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC AAA19233 to AAA2361 and AAA21501 to AAA21595 represent ribozyme sequences; CC AAA19223 to AAA2361 and AAA21501 to AAA21595 represent ribozyme sequences; CC AAA19233 to AAA2363 represent their corresponding target sequences; CC AAA21596 to AAA22475 and AAA2363 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are specially used to treat cancer, diabetic retinopathy, age related comeovascular degeneration (ARND), inflammation, and arthritis, as well as neovascular plaucoma, myopic degeneration, psoriasis, verruca vulgaris, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and the start syndromes and diseases related to the levels of ARNT, Tie-2, and the start syndromes and diseases related to the levels of ARNT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
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cc hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA17767 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, cand AAA17167 and AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17625 to AAA18385 and AAA19087 to corresponding target sequences; AAA17685 to AAA19154 represent tribozyme sequences for Tie-2, and AAA19087 to AAA19154 represent tribozyme sequences for Tie-2, and AAA19087 to AAA191522 represent their corresponding target sequences; CC aAA19223 to AAA19222 represent their corresponding target sequences; CC aAA21585 to AAA21681 represent their corresponding target sequences; CC aAA21589 to AAA21681 represent their corresponding target sequences; CC aAA21689 to AAA21681 represent their corresponding target sequences; CC aAA21689 to AAA22475 and AAA2363 to AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23622, AAA23343 to aAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related cancular degeneration (ARMD), inflammation, and arthritis, as well as
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CC desired nucleic acid (NA) that contains multiple repeats of a cc predetermined NA target sequence in a NA sample. The method involves conviding a treated sample that may contain the desired NA in which cc several predetermined repeating NA target sequences are hybridised with a cc NA probe, analysing for presence of hybridised NA containing the NA cc probe, and thereby the presence or absence of the desired NA. The method is useful for determining the presence or absence of desired nucleic cc acids that contain multiple repeats of a predetermined NA target cardenee, in a NA sample obtained from a biological sample, where the cc repeated sequence includes several predetermined repeated sequence that cdiffer in length and/or sequence. The methods can be efficiently used for cdistinguishing human and bacterial NA. The method is highly sensitive, cc and enables detection and quantification of the presence of a NA without the need to undergo a NA target sequence enrichment step prior to a NA cc hybrid detection step. The method enables rapid and accurate detection of a desired NA that contains multiple repeats of a NA target sequence. This sequence represents a probe used to detect the human Alu repeat sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2311
ACA62884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neovascular glaucoma, myopic degeneration, psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MAND/)
(TERE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Repeated nucleic acid detection method, human probe Alu12S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACA62884 standard; DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mandrekar MN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUL-1999;
25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003022163-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeated nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-AUG-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention describes a method of determining presence or absence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-DEC-2000; 2000US-00739909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2003.
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SHULTZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MANDREKAR M N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27; 31pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tereba A,
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99US-00383316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acid detection; human;
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Pred.
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No.
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1.7e+03;
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RESULT 2312
ADH70473
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Best Local
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             The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases including autoimmune diseases, degenerative nervous system diseases, graft versus host disease, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addison's disease, atrophic gastritis. Degenerative nervous system diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies, Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities such as those
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease; haddison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; alzheimer's disease; hypersensitivity disease; type I hypersensitivity; allergy; type. II hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; leprosy; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 14 BP; 2 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                    Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human; T-cell associated disease; Vbeta; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Vbeta gene repeat sequence #263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH70473
                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 667; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-059052/06.
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                                                                                                                                                                                                                                                                                                       Vbeta
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HOOD/) HOOD L E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                Rowen L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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Pred. No.
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                                                                    02-SEP-1994

08-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

03-OCT-1994

07-OCT-1994

11-OCT-1994

11-OCT-1994

04-NOV-1994
                                                                                                                                                                                                                                                                                                                15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
16-AUG-1994;
17-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          caused by viruses such as HIV, fungal infections such as those caused by the yeast genus Candida, parasitic infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative disease such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human ICAM hammerhead ribozyme target sequence (nt. position 2769).
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07-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-FEB-1994;
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14; Conserv
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Conservative
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(first entry)
94US-00218934
94US-00227958
94US-00227958
94US-00227958
94US-002271280
94US-00271280
94US-0029133
94US-0029133
94US-00293520
94US-00303030
94US-003011486
94US-00311486
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94US-0031993
94US-00337608
94US-00337508
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94US-00218934.
94US-00222795.
94US-00224483.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acid; ribozyme; trans cleavage; inhibition;
downregulation; interleukin-5; IL-5; ICAM-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Ld
1.7e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 14,
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PRINTER SERVICE SERVIC
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AAT52112
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                  Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; upocardial ischaemia; Kawasaki disease; septic shock; HIV; myocardial ischaemia; Kawasaki disease; septic shock; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
25-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozymes having modified bases and methods for in inhibiting disease related genes.
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30-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                            human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human ICAM hammerhead ribozyme target sequence (nt. position 2853)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT52112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT52112 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBÖZYME PHARM INC.
                                                                                                                                                                                                                                                                                 Homo sapiens
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Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Į,
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(first entry)
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95US-00380734
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Þ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A, Kisich K,
Beigleman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.4%;
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Pred. No. 1.8e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direnzo A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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Matulic-Adamic J,
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Mcswiggen JA;
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31-AUG-1995.

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23-FEB-1994; 23-FEB-1995;

94US-00201109 95WO-IB000156.

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Matches 11
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17-AUG-1994;
19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
23-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
11-OCT-1994;
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04-APR-1994;
07-APR-1994;
                                                                                                                                                                                                                                                                 The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modak
Tracz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-APR-1994;
18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribozymes having modified bases and methods for producing them - in inhibiting disease related genes.
                         25-MAR-2004
                                                                                                                                                                                                                                             Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb
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                                                                          ADH70501 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                   719
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                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 175; 407pp; English.
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Karpeisky A, Kisich K,
Pavco P, Beigleman L,
Usman N, Wincott FB, W
                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                             BP; 3
                         (first entry)
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94US-0022795
94US-00227958
94US-00227958
94US-00245736
94US-00291230
94US-00291433
94US-00291433
94US-00291433
94US-0039143
94US-00311486
94US-00311749
94US-00316771
94US-00337608
94US-00337608
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                                                                                                                                                                                                                                             C; 3
                                                                                                                                                                                           Score 14; DB
Pred. No. 1.8e
3; Mismatches
                                                                                                                                                                                                                                             G; 0 T; 4 U; 0 Other;
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ch K, Matulic-Adamic J, Mcswi
n L, Sullivan SM, Sweedler D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sullivan SM, Woolf T;
                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                        .8e+03
                                                                                                                                                                                                                    Length 15
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ler D, Thompson JD;
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Human Vbeta gene repeat sequençe #291.

RESULT 2316 ADQ30131

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                                                                                                   Matches
                                                                                                                           Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                     atrophic gastritis. Degenerative nervous system diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies, Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by the yeast genus Candida, parasitic infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by hypersensity of the yeast genus Candida, parasitic diffections such as those caused by schistosomes, filaria and bacterial infections such as those caused by hypobacterium. Neoplastic diseases include lymphoproliferative diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Wbeta gene VbetaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  including autoimmune diseases, degenerative nervous system diseases, graft versus host disease, hypersensitivity diseases, infectious disease and neoplastic diseases. Autoimmune diseases include Addison's disease and neoplastic diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 695; 164pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                breast cancer; ds.
                                                                                                                                                                                                       Sequence
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19-SEP-1995;
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                                                                                                                                                                                                                                                                                     such as leukaemias,
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                             TTTTATTTTATTT
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                                                                                                   Conservative
                                                                                                                                                                                                                                                          present sequence
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95US-00531241.
                                                                                                                                                                                                       3 A;
                                                                                                                                                                                                                                                                                     lymphomas and cancers such as cancer of
                                                                                                                           100.0%;
                                                                                                                                                                                                       0 C; 0 G;
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                                                                                                                           Score 14;
Pred. No.
                                                                                                                                                                                                                                                          represents a Vbeta gene
                                                                                                                                                                                                         12 T; 0 U; 0 Other;
                                                                                                      Mismatches
                                                                                                                                                    DB 1;
                                                                                                                              1.8e+03
                                                                                                                                                      Length 15;
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                                                                                                                                                                                                                                                                                     the brain,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease,
                                                                                                      Gaps
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ADQ30131 standard; DNA; 15

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CC This invention describes a novel nucleic acid containing a specific CC (vanilloid receptor type 1) receptor, or a functional derivative, allele CC or fragment of this region, or a sequence that hybridises to it under CC or fragment of this region, or a sequence that hybridises to it under CC positions 22191-223344 of GenBank AL670399, 31673-36359 of AL663116, or CC 44731-42331 or 36616-33151 of APIG8787 and is involved in transmission of CC describes a vector that contains the VR1 modulator, host cells containing CC this vector (other than human germ or embryonal stem cells) and a method CC modulator or the vector into a cell that contains the VR1 receptor by introducing the CC modulator or the vector into a cell that contains the VR1 gene. The CC products of the invention are used for detecting a transcription factor CC firm its binding to a regulatory sequence (or a double-stranded CC oligonucleotide fragment of it), e.g. by Western blotting or enzyme-CC associated with overexpression or underexpression of the transcription factor. The rucleic acids of the invention, or vectors containing them, CC are used for prevention or treatment of pain, also for treating them, CC are used for prevention or treatment of pain, also for treating containing them, CC are used for sequence represents a fragment of murine VR1 exon 1d DNA CC which is capable of binding to a transcription factor.
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                                                           Query Match
Best Local S
Matches 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid that modulates expression of the vanilloid receptor-1, useful for control of pain or sensitivity disorders, comprises sequences from control regions of the receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2003; 2003WO-EP013522.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pain transmission; primary sensory neuron; transcription factor;
detection; MZF1; NPkappaB; NPAT; GATA1; sensitivity disorder; analgesia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ds; VR1 receptor; vanilloid receptor type 1; modulator;
                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-468868/44.
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14; Conserv
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                                                                                            1.4%;
                                                                                                                             C; 3
   15
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                                                                                                                             G; 12
                                                                             Score 14;
Pred. No.
                                                                Mismatches
                                                                                                                             T; 0 U; 0 Other;
                                                                                           DB 1;
                                                                               1.8e+03
                                                                                              Length 15;
                                                                 Indels
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                                                                Gaps
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RESULT 2317

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AACTCCTGACCTCA 16

Matches Query Match

Similarity

1.4%;

Score 14; Pred. No.

1.8e+03; DB 1;

Length 16; Indels

Conservative

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Mismatches

0

Gaps

0

1124 AACTCCTGACCTCA 1137

Sequence 16

ВP;

4 A;

6 C; 2 G; 4 T; 0 U; 0 Other;

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ADE14023

ADE14023

ACC ADE1

ACC AD
                                                                                                              cc heterologous sequence, diagnosing or prognosing glaucoma in a sample cobtained from a cell or bodily fluid (comprising detecting a polymorphism cc in a promoter region of the optineurin gene, associated with a glaucoma cphenotype), detecting a SNP sequence variation in a sample containing CC DNA, detecting the presence of an optineurin promoter sequence variation cc in a sample containing DNA, determining the presence or increased cc susceptibility to glaucoma or to a progressive ocular hypertensive cc disorder resulting in loss of visual field in a patient (or the severity corprogression of glaucoma in a patient, comprising providing cc nucleic acid region containing the variation within the optineurin cc promoter and amplifying the DNA) and detecting a polymorphism (comprising cobtaining a sample containing human genomic DNA, providing a nucleic acid cepable of detecting a SNP located within an optineurin promoter, and companies of the polymorphism. The invention is used to diagnose and compresent sequence is an optineurin promoter motif, repeat element or containing the promoter motif, repeat element or contains an optineurin promoter motif, repeat element or contains the optineurin promoter motif, repeat element or contains the optineurin promoter motif, repeat element or contains an optineurin promoter motif, repeat element or contains the optineurin promoter motif, repeat elem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated nucleic acid (N1) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineur promoter appearing as ADE11390. Also included are the optineurin promot operably linked to a heterologous nucleic acid, a nucleic acid capable detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and relat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Optineurin promoter motif, repeat element or regulatory region #132
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                                                                                    putative regulatory
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RAYMOND V.
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RESULT 2318
ADH70756
CC including autoimmune diseases, degenerative nervous system diseases, cc graft versus host diseases, hypersensitivity diseases, infectious diseases, cc and neoplastic diseases. Autoimmune diseases include Addison's disease, cc arrophic gastritis. Degenerative nervous system diseases include multiple clearosis and Alzheimer's disease. Hypersensitivity diseases include Type cc I hypersensitivities such as those present in cc allergies, Type II hypersensitivities such as those present in cc Goodpasture's syndrome and Type IV hypersensitivities such as those caused by cruses such as HIV, fungal infections such as those caused by cruses such as HIV, fungal infections such as those caused by chistosomes, filaria and bacterial infections such as those caused by cc Mycobacterium. Neoplastic diseases include lymphoproliferative diseases such as leukaemias, lymphomas and cancers such as cancer of the brain, cc breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; T-cell associated disease; Vbeta; autoimmune disease; degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; reoplastic disease; hypersensitivity disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; alteriore edisease; hypersensitivity disease; type I hypersensitivity disease; type I hypersensitivity; Goodpasture's syndrome; altergy; type II hypersensitivity; Goodpasture's syndrome; type II hypersensitivity; leprosy; infection; disease; viral infection; schistosome; filaria; bacterial infection; parasitic infection; schistosome; filaria; bacterial infection; leprosy; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH70756 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, compructeic acid primers specifically priming and allowing amplification
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19-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a kit for diagnosing and treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HOOD/) HOOD L E. (ROWE/) ROWEN L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer;
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95US-00531241.
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Query Match

Sequence 16

₿₽;

N A.

0 C; 0

G; 14 T; 0 U; 0 Other;

Score 14;

DΒ 1;

Length 16;

Query Match Best Local Similarity

100.0%;

Score 14; Pred. No.

DB 1; 1.9e+03;

Length 17;

Sequence

17

BP; 4 A;

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G; 3 T; 0 U; 0 Other;

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AAT93362
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                                                    CC markers. Mutations in the amplification primers for microsatellite CC markers. Mutations in the amplified sequences can be detected using the CC nucleic acid sequences of the invention (see AAT93326-T93354). The CC region of human chromosome 10 bounded by the markers D105541 and D105215. CC (I) is a tumour suppressor gene, particularly involved in prostatic CC cancer but also in melanoma, glioma and non-Hodgkin's lymphoma. Any CC nucleic acid that hybridises selectively to the specified chromosomal CC region can be used to determine susceptibility of a patient to cancer and CC for diagnosis/prognosis, sepecially of prostatic cancer, i.e. by CC treat cancer, especially when included in a viral vector. Similar CC treat cancer, sepecially when included in a viral vector. Similar CC treat cancer, sepecially when included in a viral vector. Similar CC molecules capable of hybridising to the protein, particularly antibodies. CC The labelled molecules when coupled to a cytotoxin can be used for cancer treatment. The encoded protein can be used to raise antibodies and these cused to screen DNA expression libraries or for polypeptide isolation. (I) CC allows differential diagnosis between neoplasia and hyperplasia of the prostate (all tumours with a log loss have lost this region) and concernination of micro-metastases in the blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid hybridising to chromosome for diagnosis, prognosis and treatment assessing susceptibility to cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMAGE clone 264611; gene fragment; human; chromosome 10; D10S541 marker; D10S215 marker; tumour suppressor gene; prostatic cancer; cancer therapy; melanoma; glioma; non-Hodgkin's lymphoma; cancer susceptibility; diagnosis; prognosis; mutation detection; suppressor gene; neoplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Spurr N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 68; 127pp;
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i, Mismatches 0;
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AAA22845
                                               Cc cleaving activity, which specifically cleave RNA encoded by an aryl complete transporter (ARNT) gene, an integrin subunit beta 3 cc gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17562 and AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cc and AAA19155 to AAA1222 represent their corresponding target sequences; CC AAA19154 represent alpha 6 subunit, and AAA21352 represent ribozyme cc sequences for integrin alpha 6 subunit, and AAA21352 to AAA21500 and AAA19259 to AAA22475 and AAA2363 to AAA21500 and AAA2369 to AAA22475 and AAA2363 to AAA2342 represent their corresponding target sequences; CC AAA23422 represent their corresponding target sequence for integrin subunit beta 3, and AAA23476 to AAA23262, AAA23343 to CC AAA23422 represent their corresponding target sequences of the invention are used for modulating the synthesis, expression and/or CC integrin subunit beta 3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related companies and companies. Kiupel-Trenaunav-Weber syndrome. Sturge Weber CC syndrome. Kiupel-Trenaunav-Weber syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA22845 standard; RNA; 17 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 54; Page 246; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-591315/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Integrin subunit beta 3 substrate sequence SEQ ID NO:6071
                   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
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  subunit alpha-6,
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    subunit beta-3
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA, encoded by an aryl CC hydrocarbon nuclear transporter (ARNI) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNI, CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cc and AAA19155 to AAA19222 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19086 cc and AAA19223 to AAA20361 and AAA19221 represent their corresponding target sequences; CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA22475 and AAA23363 to AAA2332 to AAA21500 and CC stability of an are used for modulating the synthesis, expression and/or creating in the synthesis, expression and/or creating and companies factor, especially ARNIT, and and arthritis, as well as macular degeneration (ARMD), inflammation, and arthritis, as well as
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiotibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 0 C; 4 G; 0 T; 8 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-591315/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 54; Page 243; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-MAR-1998;
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Pred. No. 1.9e+0
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Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expression and/or stability
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA171671 to AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA1364 represent their corresponding target sequences; AAA17655 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 and AAA19155 to AAA20361 and AAA219017 corresponding target sequences; AAA19223 to AAA20361 and AAA21501 to AAA21505 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA1509 to AAA21688 represent their corresponding target sequences; AAA1689 to AAA22168 represent their corresponding target sequences; AAA21509 to AAA22363 and AAA23631 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA23343 to AAA234342 represent their corresponding target sequences of AAA23422 represent their corresponding target sequences.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNY, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA22807 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Integrin subunit beta 3 substrate sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                               Pavco PA,
                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                        27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                    24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 TGCCCAAGCTGGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCCAAGCTGGTC 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                               Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                        98US-0079678P
                                                                                                                                                                                                                                                                                                                                                     99WO-US006507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; 5 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                               Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO:6033.
                                                                                                                                                                                                                                                               Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
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cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme

Claim 54; Page 243; 305pp; English

WPI; 1999-591315/50.

The present invention describes enzymatic nucleic acid molecules with RNA

ribozymes for modulating the synthesis, expression and/or stability mRNA encoding an angiogenic factors.

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AAA22973/c
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Best Local S
Matches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme seq for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; aryl hydrocarbon nuclear transport; ARNT; TIB-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; and articles antipsoriatic; ARMD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA22973 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17
WPI; 1999-591315/50
                                                                                                                                                                                   27-MAR-1998;
                                                                                                                                                                                                                                            24-MAR-1999;
                                                                                                                                                                                                                                                                                                         07-OCT-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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3; Conserv
                                                                                                                         RIBOZYME
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                                                         Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 0 A; 0 C; 3 G; 0 T; 14 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                   98US-0079678F
                                                                                                                                                                                                                                               99WO-US006507
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                                                            Jarvis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         substrate sequence SEQ ID NO:6199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14; DB 1;
Pred. No. 1.9e+03;
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                                                            Coeshott
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                                                            Mcswiggen
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cc and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19086 to AAA19086 cand AAA19155 to AAA19222 represent their corresponding target sequences; AAA19123 to AAA20361 and AAA21501 to AAA21595 represent ribozyme company to AAA21681 and AAA21501 to AAA21595 represent ribozyme company to AAA21686 represent their corresponding target sequences; AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA2476 to AAA23262, AAA23343 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or cespecially vised to treat cancer, diabetic retinopathy, age related company to the synthesis of the following the synthesis, expression and/or cespecially vised to treat cancer, diabetic retinopathy, age related company glaucoma, myopic degeneration, psoriasis, verruca vulgaris, and other syndrome, and diseases related to the levels of ARMT, Tie-2, and other syndromes and diseases related to the levels of ARMT, Tie-2, interin subunit alpha-6 of ARMT, Tie-2 of ARMT, Tie-2 of Tie-2 
Sequence 17 BP; 8 A; 3 C; 0 G; 0 T; 6 U; 0 Other;
                                                                                                                                                             integrin subunit alpha-6, or integrin subunit beta-3
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RESULT 2325
AAA22846
                                                                                                                  Query Match
Best Local 9
                                                                                                          Matches
AAA22846
                  AAA22846 standard; RNA; 17
                                                                                      776 ATTTTTAGTAGAGA 789
                                                                  14 ATTTTTAGTAGAGA 1
                                                                                                          14;
                                                                                                                     Similarity
                                                                                                           Conservative
                                                                                                                   100.0%;
                   ВP
                                                                                                           0;
                                                                                                                    Score 14;
Pred. No.
                                                                                                            Mismatches
                                                                                                                               DB 1;
                                                                                                                     1.9e+03;
                                                                                                            0
                                                                                                                              Length 17;
                                                                                                            Indels
                                                                                                            0
                                                                                                            Gaps
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Integrin subunit beta 3 substrate sequence SEQ ID NO:6072 19-JUN-2000

(first entry)

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatologic; nutiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiotibroma; tuberous sclerosis; pot wine stain; Sturge Weber syndrome; ss. Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens

WO9950403-A2

07-OCT-1999.

24-MAR-1999; 99WO-US006507

27-MAR-1998;

98US-0079678P

(RIBO-) RIBOZYME PHARM

Pavco PΑ, Roberts E, Jarvis H, Coeshott ú Mcswiggen

1999-591315/50

XX PRANCE AND XX Novel of an an ribozymes mRNA encod encoding for modulating an angioge angiogenic the e synthesis, factors. expression and/or stability

Claim 54; Page 246; 305pp; English

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,

54; Page 254; 305pp; English

ribozymes

for

modulating the an angiogenic f

factors.

expression and/or stability

encoding

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RESULT 2326
AAF06152
ID AAF0615
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Best Local S
Matches
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                                     Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; erythropoietin; granulocyte colony stimulating factor; interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-FEB-2001
useful for producing e.g. granulocyte colony interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                    Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF06152 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-APR-2000; 2000WO-US009721
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     drome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu synother syndromes and diseases related to the levels of ARNT,
                                                                                                                                                                                     2000-647423/62.
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                                                                                                                                                                                                                                                                                                                                                                      RIBOZYME PHARM INC
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                                                                                                                                                                                                                                                                    Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0129390P
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                                                                                                                                                                                                                                                                    Pavco P,
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Pred. No.
                                                                                                                                                                                                                                                                    Mcswiggen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.9e+03
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                                         factor protein,
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The present invention relates to enzymatic and antisense nucleic acid

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Claim 42; Page 123; 164pp; English.

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RESULT 2327
AAF05507
ID AAF0550
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Best Local
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     :7.
                                                                                                              encoding the TR2 Orphan receptor, BAR3/COUP-TF-1, the GATA traffactor gene, IRF-2 and/or the CAATT Displacement Protein (CDP) Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the preythropoietin, granulocyte colony stimulating factor protein interferon alpha
                                                                                                                                                                                                                                                                             Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 2 C; 0 G; 0 T; 13 U; 0 Other;
                                                                                    Sequence 17 BP; 1 A; 1 C; 2 G; 13 T; 0
                                                                                                                                                                                        The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
                                                                                                                                                                                                                                                  Claim 18; Page 118; 164pp; English.
                                                                                                                                                                                                                                                                                                                                           WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                                                                                                      Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF05507;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-APR-2000; 2000WO-US009721.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200061729-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hammerhead ribozyme substrate #2726.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interferon alpha;
                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431 TATTTTATTTTTTT 444
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2; Conserv
                                          Similarity
TTTTGTATTTTTT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UAUUUUAUUUUUUU 14
                                                                                                                                                                                                                                                                                                                                                                      Zwick M,
                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.
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                                                                                                                                                                                                                                                                                                                                                                      Pavco P,
                                          100.0%;
                                                          1.4%;
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                                          Score 14;
Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                             Mismatches
                                                                                                                               of) genes involved in the production stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.9e+03
                                                       DB 1;
                                                                                    U; 0 Other;
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                                          1.9e+03;
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                                                        Length 17;
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RESULT 2328
ABT36209
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                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that (CC hybridizes to them under highly stringent conditions, or the complement (CC acids of them under highly stringent conditions, or the complement (CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti) sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, epilypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral CC degeneration, specifically cancer but also Alizheimer's disease and CC stitute and sense and containing the sense sense is useful for diagnosis and/or prognosis of these and containing the sense containing the sense and containing the sense c
                                                                                                                      Query Match
Best Local Similarity
                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABT36209 standard; DNA;
                                                                                                                                                                                                                                            diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003025175-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour suppression related human fukutin oligo SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-JUN-2003
                                                                                                                                                                                                 Sequence 17 BP; 5
                                             492
                                                                                                14;
                                             GATCACAGCTCACT 505
                                                                                              1.4%; So llarity 100.0%; I Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                 A;
                                                                                                                                                                                                 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tuijnder M;
                                                                                                                      Score 14; DB 1;
Pred. No. 1.9e+(
                                                                                                Mismatches
                                                                                                                           1.9e+03;
                                                                                                                                                 Length 17
                                                                                                      Indels
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RESULT 2329

Human MDZ7 scanning oligonucleotide SEQ ID 5187

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                                                                                                        ADB04201
                                                                                                                        RESULT 2330
                                                                                                                                                                                                                                                                                                                          The present invention relates to novel human zinc finger-containing CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is coded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, CC MDZ7 is encoded at chromosome 1fp11.2 and MDZ12 is encoded at chromosome 1fp11.2 and MDZ12 is encoded at chromosome CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, CC or in manufacturing a medicament for treating or preventing a disorder CC associated with decreased or increased expression or activity of MDZ3, CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic CC acids and proteins are also useful for diagnosing or monitoring a disease CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic CC acids can also be used as probes to detect and characterize gross CC useful in constructing microarrays for measuring gene expression. The CC useful in constructing microarrays for measuring gene expression. The CC vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7 chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               developmental disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB04202;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-423107/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUL-2002; 2002EP-00016874
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                              20-NOV-2003
                                                                                                                                                                                                                                                                                              Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AEOM-) AEOMICA INC
                                                            ADB04201;
                                                                                           ADB04201 standard; DNA; 17
                                                                                                                                                                                       162 ATTTTGTATTTTTT 175
                                                                                                                                                                                                                                  14;
                                                                                                                                                                       w
                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8; SEQ ID NO 5188; 103pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GuY,
                                                                                                                                                                                                                                                                                              BP; 2 A; 0 C; 4 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                  Conservative
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                              (first entry)
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                                                                                                                                                                                                                              100.0%; **
                                                                                                                                                                       16
                                                                                                                                                                                                                                                  Score 14;
Pred. No.
                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                  1.9e+03;
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                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EP1281758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                  Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                     Homo sapiens
                                                                                                                                     Human MDZ7 scanning oligonucleotide SEQ ID 5190.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; SEQ ID NO 5187; 103pp; English
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                                                      developmental
                                                                                                                                                                        20-NOV-2003
                                                                                                                                                                                                                                         ADB04204 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to novel human
                                                                                                                                                                                                                                                                                                                                                            162
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                         ATTTTGTATTTTT 175
                                                                                                                                                                                                                                                                                                                           ATTTTGTATTTTT 17
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                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 2 A; 0 C; 3 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                      (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                             1.4%;
                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                             Score 14;
Pred. No
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                             1.9e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  finger-containing
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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7922.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15p11.2 and MDZ12 is encoded at chromosome 15p26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 generic locus. The probes are
                                                                                                                 useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-2002; 2002EP-00016874
                                                                            Sequence 17 BP; 3 A; 0 C; 2 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; SEQ ID NO 5190; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-423107/40.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gu Y,
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nguyen
                 100.0%;
                                        1.48;
0,
                   Score 14; pred. No.
red. No. 1.
                                        DB 1;
                 1.9e+03;
                                    Length 17;
  Indels
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MDZ3,
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5 Query Match
Best Local Similarity
Matches 14; Conserv 162 ATTTTGTATTTTTT 175 |||||||||||| 1 ATTTTGTATTTTTT 14 Gaps

0

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RESULT 2332
ADB04203
ID ADB0420
Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7
                                                                                                                                          Human MDZ7 scanning oligonucleotide SEQ ID
                                                                                                         chromosome
                                                                                                                                                            20-NOV-2003
                                                                                                                                                                                                ADB04203 standard; DNA; 17
                                                                                                         6p21.3-22.2;
                                                                                                                                                            (first entry)
                                                                                                         chromosome
                                                                                                         16p11.2; chromosome 15q26.1;
                                                                                                                                            5189.
                                                                                                                  7q22.1;
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02-AUG-2001; 2001US-00922181

30-JUL-2002; 2002EP-00016874

EP1281758-A2

Homo sapiens. developmentai

disorder; ss.

cancer;

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RESULT 2333
ADB0427
ID ADB0427
XX ADB0427
XX ADB0427
XX ADB0427
XX ADB0427
XX Cytosta
KW Cytosta
KW Cytosta
KW Chromos
KW Chromos
KW Chromos
XX Chromos
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human MDZ7 scanning oligonucleotide SEQ ID 5265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB04279 standard; DNA; 17
   New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disor
                                                                                                                                                                                                                                                               02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                  05-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        developmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-NOV-2003
                                                                                                                                                      Shannon M,
                                                                                                                                                                                                                                                                                                                         30-JUL-2002;
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                                                                                                                                                                                                               AEOMICA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                      Gu Y,
                                                                                                                                                                                                                                                                                                                         2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.4%;
                                                                                                                                                      Nguyen
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.9e+03;
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         , useful in a disorder
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proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
                                               useful in constructing microarrays for measuring gene expression. proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the inventic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   associated with decreased or increased expression or activity of MDZ3, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                  invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NO 5265; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                  to novel human
                                                                                                                                                                                                                                                                                                                                                                                                                                    zinc
                                                                                                                                                                                                                                                                                                                                                                                                                                  finger-containing
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Matches Query Match Best Local : Sequence 17 BP; 4 A; 1 C; 3 G; 9 T; 0 U; 0 Other; 614 TTTTTTGAGACAGA 627 14; Similarity Conservative 100.0%; 0 Score 14; Pred. No. Mismatches 1.9e+03; DB 1; Length 17; 0 Indels 0; Gaps 0,

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RESULT 2334
                Cytostatic;
                                                 Human MDZ7 scanning oligonucleotide SEQ ID
                                                                                      20-NOV-2003
                                                                                                                          ADB04286;
                                                                                                                                                           ADB04286 standard; DNA; 17
                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                      TTTTTGAGACAGA 17
immunostimulant; gene therapy; vaccine; human; protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7
                                                                                        (first
                                                                                        entry)
                                                       5272
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zinc finger protein; MD2 chromosome 6p21.3-22.2; developmental disorder; Homo sapiens. chromosome 16p11.2; chromosome 15q26.1; ss.

cancer;

EP1281758-A2.

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181

(AEOM-) AEOMICA INC

Shannon Z, 5 ĸ Nguyen

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful manufacturing a medicament for treating or preventing a disord associated with decreased or increased expression or activity MDZ4, MDZ7 or MDZ12, e.g. cancer. activity of MDZ3,

8; SEQ H NO 5272; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,

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RESULT 2335
ADB04311
XX
ADB0431
XX
AC ADB0431
XX
DT 20-NOV.
DX Human |
XX
CYtost
KW Cytost
KW Chrome
KW Chrome
KW Chrome
KW Chrome
KW Chrome
XX
Chrome
KW Chrome
XX
FOR O5-FE
XX
PN EP128
PN 05-FE
XX
PN EP128
PT NE
PF 30-JI
XX
XX
PR 02-A
XX
PR 02-A
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PT New
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Best Local S
Matches 14
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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7g22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15g26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross
                                                                                                                                                                                                                                                                                                                                                                 New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                              Example 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-423107/40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      scanning oligonucleotide SEQ ID 5297
                                                                                                                                                                                                                                                                                              SEQ ID NO 5297; 103pp; English
                                                                                                                                                                                                                                                                                                                                           or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 4 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
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ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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1.9e+03;
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맑 5

Matches

14;

837 GATCTGCCTGCCTC

850

GATCTGCCTGCCTC

Local

Similarity

ilarity 100.0%; Conservative

0

Mismatches

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Gaps

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1.9e+03

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RESULT 2336
ACC64260
ID ACC64260
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Best Local S
Matches 14
            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The useful in constructing microarrays for measuring gene expreproteins are useful as therapeutic agents for gene therapy vaccines. The present sequence was used to illustrate the i
                                                                   The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murine oligonucleotide associated with tumour supression, SEQ ID 1507.
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                                          Sequence 17
                                                                                                                                                                                                                                                                                                                                                                  Telerman
                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 schizophrenia; ss.
                                                                                                                                                                                                                                          Disclosure; Page 207; 738pp;
                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR ENGINES LAB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         647
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTGGAGTGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTGGAGTGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ilarity 100.0%;
Conservative
                                          BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                 Amson R,
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Score 14;
Pred. No.
                                                                                                                                                                                                                                            French
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB
              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.9e+03;
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              Length 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention.
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RESULT 2337
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ACC68567
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Best Local (
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                     The present invention relates to murine oligonucleotides (ACC62754-ACC68906), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (ant) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC67292 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murine oligonucleotide associated with tumour supression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-2003
                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-333167/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    schizophrenia;
tumour suppression;
 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance;
                                           Murine oligonucleotide associated with tumour supression,
                                                                                                                                 ACC68567 standard; DNA; 17
                                                                        01-JUL-2003
                                                                                                                                                                                                                                                                                 Local Similarity 100.0%;
                                                                                                                                                                                                                                    426 CTTTTTATTTATT 439
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                                                                                                                                                                                                                                                                     Conservative
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                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                            1 C; 1 G;
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                                                                                                                                                                                                                                                                   Score 14; DB; Pred. No. 1.00; Mismatches
                                                                                                                                                                                                                                                                                                                            12 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                  DB 1;
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                                              SEQ ID 5814.
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Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti-speece respents) and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         schizophrenia;
                                                                                                                                                                         cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 710; 738pp; French.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2001; 2001FR-00011979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
             17-SEP-2001; 2001FR-00011981
                                                                                                WO2003040369-A2
                                                                                                                                                                      primer; probe; tum
virus resistance;
                                                                                                                                                                                                                            Tumour suppression/reversion associated nucleotide #1087.
                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                 ADB40764 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 2 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                        17-SEP-2002; 2002WO-IB004219
                                                                     15-MAY-2003
                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                        18-DEC-2003
                                                                                                                                                                                                                                                                                                      ADB40764;
                                                                                                                                                                                                                                                                                                                                                                                                                                     837 GATCTGCCTGCCTC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14;
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                                                                                                                                                                                                                                                                                                                                                                                                          GATCTGCCTGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amson R,
                                                                                                                                                                                                                                                            (revised)
(first entry)
                                                                                                                                                                      transgenic animals;
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                                                                                                                                                                                                                                                                                                                                      BP
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
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ADB40441/c
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                       cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizoph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the nucleotides, or the complement, or corresponding RNA, of the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acide, as in vitro sense and antisense sequences, of nucleotides involved in tumour
 Telerman A,
                                                                    17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fragments of at least 15 consecutive nucleotides of these nucle sequence having at least 80% identity, after optimal alignment, nucleotides, a sequence that hybridizes under stringent conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-441574/41
                                                                                                      17-SEP-2002; 2002WO-IB004219
                                                                                                                                                                                                                                                                                                                                                                                                                   ADB40441;
                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                      WO2003040369-A2
                                                                                                                                                                                                                                                                                                                              Tumour suppression/reversion associated nucleotide #764
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB40441 standard; DNA; 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acid encoding human prostate membrane-specific antigen, for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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Amson R,
                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.4%;
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 Tuijnder M;
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Pred. No. 1.9e+03;
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l alignment, with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conditions with
                                                                                                                                                                                                                                                          schizophrenia;
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nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
                                           or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringers and alignment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful e.g.
polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also relat
Sequence 17 BP; 5 A; 4 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 121; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and antibodies.
  G; 3 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and viral infection, also related
  U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                        for detecting
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Matches Query Match Best Local (938 TGTTACCCAGGCTG 951 17 Similarity TGTTACCCAGGCTG 4 Conservative 0; 1.48; Score 14; Pred. No red. No. 1. Mismatches DB 1; 1.9e+03; Length 17; Indels 0; Gaps 0

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RESULT 2341
ADI47773
                                                                                                                                                                                           tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; nootropic; neuroleptic; proprimer; PCR; gene chip; antisense; viral disease; tumour;
                                                                                                                                                                                                                                    Human tumour suppression/reversion-related DNA sequence SeqID276.
                                                                                                                                                                                                                                                         15-APR-2004
                                                                                                                                                                                                                                                                                               ADI47773 standard; DNA; 17
                                                                                                                                                              Homo sapiens
                                                                                                                                                                                   degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
                                                                                                                                                                                                                                                         (first entry)
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New isolated nucleic acid, useful for treating viral diseases associated

WPI; 2003-313354/30.

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Amson R,

Tuijnder M;

27-MAR-2003 WO2003025177-A2

17-SEP-2001; 2001FR-00011980 17-SEP-2002; 2002WO-IB004523

MOLECULAR ENGINES LAB

with tumors and and transfected

cell degeneration, cells.

also related polypeptides, antibodies

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in the phenomena of tumour suppression, tumour reversion, apoptosis
and/or resistance to viruses. The invention may be useful for the
development of compounds with a cytostatic, virucide, neuroprotective,
conotropic or neuroleptic activity. The DNA sequences may be useful as
probes and primers for detecting, indentifying, quantifying and/or
amplifying nucleic acid, for example as one component of a gene chip, in
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of recombinant
convitro as antisense reagents and for production of paramaceuticals for prevention and/or treatment of viral diseases that
convitro as antisense for prevention and/or treatment of viral diseases that
convertised by development of tumours or cell degeneration.
The specifically cancer but also Alzheimer's disease and schizophrenia. The
convertised by development of tumours or cell degeneration.
Convertised by development of tumours or cell degeneration
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Best Local S
Matches 14
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                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-2002; 2002WO-IB004523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human tumour suppression/reversion-related DNA sequence SeqID1221.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADI48718 standard; DNA;
This invention relates to novel isolated nucleic ac
in the phenomena of tumour suppression, tumour reve
and/or resistance to viruses. The invention may be
                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-MAR-2003
                                                                                                                                                                                                                                                                             Telerman A,
                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention relates to novel isolated nucleic acid sequences involved
                                                                                                                                                                                                                                    2003-313354/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  837 GATCTGCCTGCCTC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   l Similarity
14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               suppression; tumour reversion; apoptosis; virus resistance;
                                                                                                                                                                                                                                                                                                                             MOLECULAR ENGINES LAB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ilarity 100.0%;
Conservative
                                                                                              SEQ ID NO 1221;
                                                                                                                                                                                                                                                                             Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
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                                                                                                                                                                                                                                                                             Tuijnder M;
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                                                                                              30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; I
1.9e+03;
                          d nucleic acid sequences involved tumour reversion, apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
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useful

Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase of protein kinase PKR genes, for treating cancer and inflammatory disease

disease.

o R

The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR)

Claim 59;

SEQ ID NO

2968; 317pp;

English

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RESULT 2343
ADL49435
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp. wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthriti restencesis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                         05-APR-2001; 2001US-00827395.
29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PKR substrate sequence #549.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL49435;
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                                                                                                                                                            WPI; 2003-058513/05
                                                                                                                                                                                             Blatt L,
                                                                                                                                                                                                                                                                                                                            03-APR-2002; 2002WO-US010512
                                                                                                                                                                                                                                                                                                                                                                 17-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                WO200281628-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                               substrate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-2004
                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    717 CCCAGCCTCCTGAG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                               Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
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                                                                                                                                                                                                Haeberli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14;
Pred. No.
                                                                                                                                                                                                ۵,
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                                                                                                                                                                                               Mcswiggen
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1.9e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cord injury; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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RESULT 2344
ADL49461
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Best Local Similarity
Matches 10; Conserv
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Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatrory disease; heumatoid arthritis; restenosis; asthma; Crohn's disease; disease; heumatoid; rejection; autolmmune disease; hupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR; substrate; ds.
                                                                                                                                                                                                                                                                                                                                       05-APR-2001; 2001US-00827395
29-MAY-2001; 2001US-0294412P
28-AUG-2001; 2001US-0315315P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL49461 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-APR-2002; 2002WO-US010512.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200281628-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         substrate; ds.
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                                                                                                                                                                                                                                                                             (RIBO-)
                                                                                                                                               2003-058513/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724 TCCTGAGTAGCTGG 737
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                                                                                                                                                                                                                                                                          RIBOZYME PHARM INC
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                                                                                                                                                                                                         Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.4%;
71.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
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                                                                                                                                                                                                         Haeberli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽₽
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Pred. No. 1.9e+03;
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                                                                                                                                                                                                         Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR)

Query Match Best Local Similarity

100.0%;

Score 14; Pred. No.

DB 1; 1.9e+03;

Length 17;

1.4%;

Claim 59;

SEQ ID NO 2994; 317pp; English.

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RESULT 2345
ACC85669
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune disease, luqus, multiple sclerosis, transplant/graft rejection, ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gent and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of target RNA in a cell. The present RNA sequence represents a human PKR analysis of the securiors.
                              The present invention relates to a method of identifying RNA ligands that bind to a target molecule, comprising treating a first pool of RNA ligands that collectively bind more than one target under conditions effective to reduce the concentration or eliminate the presence of one or more predominate target-binding RNA ligands from the first pool of RNA ligands. In particular, the method can be used to identify RNA aptamers capable of binding to heat shock factor protein. The present sequence is a DNA sequence shown in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4 A; 2 C; 7
Sequence 17
                                                                                                                                                                                                                                            Identifying RNA ligands that bind to a target molecule comprises treating a first pool of RNA ligands that collectively bind more than one target to reduce the concentration or eliminate the presence of target-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA aptamer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RNA ligand aptamer marker/probe Anti-BBSII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC85669;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC85669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              substrate sequence.
                                                                                                                                                                                          Disclosure; Page 65;
                                                                                                                                                                                                                            to reduce the RNA ligands.
                                                                                                                                                                                                                                                                                                                                                                                                                   24-JUN-2002; 2002US-0391255P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-JUN-2003; 2003WO-US019966.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004001065-A2
                                                                                                                                                                                                                                                                                                               WPI; 2004-071741/07.
                                                                                                                                                                                                                                                                                                                                                                                     (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       394 ĢСТĢĢĢĀТТАСАĢĢ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||:||||::|||||
GCUGGGAUUACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; DNA;
   B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ligand; heat shock factor protein; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
 2 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.4%;
 5 C; 5
                                                                                                                                                                                          ; ddo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         407
                                                                                                                                                                                          English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 0 T; 4 U; 0 Other;
 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 14; I
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88
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RESULT 2
ADP08721
ADO80021/
ID ADO8
XX
AC ADO8
XX
DT 26-A
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                                                                           RESULT 2347
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                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                  Matches
                                                                                                                                                                                                                                        The invention relates to a novel method for identifying a subject at risk of breast cancer which comprises detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The method of the invention has cyrostatic applications and may be useful for identifying a risk of breast cancer, as well as therapeutic and prophylactic treatments that specifically target breast cancer, such as gene therapy. The current sequence is that of an Extend primer of the invention which was used to genotype single nucleotide polymorphisms within human glycoprotein VI (platelet) (GP6; GPIV;GPVI) DNA which is located at chromosomal position 19q13.4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     breast cancer; cytostatic; gene therapy; GP6; GPIV; GPVI; chromosome 19q13.4; ss;
                                                                                                                                                                                                                  Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a subject at risk of breast cancer by detecting the presence or absence of one or more nucleotide polymorphic variations, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-NOV-2002; 2002US-0429136P.
24-JUL-2003; 2003US-0490234P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-NOV-2003; 2003WO-US037966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Extend
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP08721 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 83; 286pp; English.
  26-AUG-2004
                                                   AD080021
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                                                                                                                                                                  14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleotide polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer 58
                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENOM INC
                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCGCCAGGTTGATC
                                                                                                                                         GATTACAGGCGTGC 412
                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nelson MR,
                                                                                                                                                                                                                                                                                                                                                                                                               preventing and/or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                  Conservative
  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used
                                                 DNA; 17
                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to genotype human glycoprotein VI polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Braun
                                                                                                                                                                                            1.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17
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                                                                                                                                                                                Score 14;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kammerer SM,
                                                                                                                                                                                                                                                                                                                                                                                                                 breast cancer.
                                                                                                                                                                                            DB 1;
                                                                                                                                                                              1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; platelet glycoprotein VI; PCR; primer; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reneland
                                                                                                                                                                                            Length 17;
                                                                                                                                                                   Indels
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                                                                                                                                                                  0
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                                                                                                                                                                   Gaps
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Example 6; Page 91; 227pp; English

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Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the DLG1, KIAA0783, DPF3 or CENPC1 regions which are associated with breast cancer in a nucleic acid sample from a
                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DICENPC1; SNP; single nucleotide polymorphism; centromere protein C: Centromere autoantigen C1; chromosome 4q12-q13.3; extend; primer;
                                                                                                                                                                                                                                                                                                                                     25-NOV-2002; 2002US-0429136P
24-JUL-2003; 2003US-0490234P
                                                                                                                                                                                                                                                                                                                                                                              10-JUN-2004.
                                                                                                                                                                                                                                                                                    WPI; 2004-441037/41.
                                                                                                                                                                                                                                                                                                      Roth
                                                                                                                                                                                                                                                                                                                                                              25-NOV-2003; 2003WO-US037943
                                                                                                                                                                                                                                                                                                                                                                                                WO2004047514-A2
                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CENPC1 extend primer
                                                                                                                                                                                                                                            subject.
                                                                                                                                                                                                                                                                                                                     (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                     Nelson MR,
                                                                                                                                                                                                                                                                                                     Braun
                                                                                                                                                                                                                                                                                                      P
                                                                                                                                                                                                                                                                                                      Kammerer
                                                                                                                                                                                                                                                                                                      MS,
                                                                                                                                                                                                                                                                                                       Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                        IAA0783; DPF3;
protein C1;
                                                                                                                                                                                                                                                                                                                                                                                                                                   88.
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The present invention relates to a method for identifying a subject at crisk of breast cancer. The method comprising detecting the presence or comprise of one or more polymorphic variations associated with breast cacid caid caid sample from a subject. The nucleic acid sample comprises the DLG1 region (AD079402), KIAA0783 region (AD079403), DP3 cregion (AD079404) or CENPC1 region (AD079405). The gene DLG1 (discs, clarge homolog 1 (Drosophila)) is also known as synapse-associated protein comprises the DLG1 has been mapped to chromosomal position 329. The gene KIAA0783 is also known as synapse-associated protein is a convel gene with unknown function, however, being a zinc finger protein, it likely to be a transcription factor. The gene DP3 (D4, zinc and convel gene with unknown function, however, being a zinc finger protein, compared to chromosomal position 721.3. The KIAA0783 region (AD079403) is also known as CEND4, cer-d4, FLJ14079 and 2810403B03Rik. DPF3 is a Rho family guanine-nucleotide exchange factor. DPF3 has been mapped to chromosomal position 1424.3-q31.1. The compared to chromosomal position 1424.3-q31.1. The compared to chromosomal position 4012-q13.3. CENPC1 has been mapped to chromosomal position 4012-q13.3. CENPC1 is a centromere protein containing proper kinetochore size and a timely transition to anaphase. The method is useful for identifying a subject at risk of breast cancer, for early contains. The present and a breast cancer treatment, and in clinical drug trials. The present sequence was used in an example from the invention.

Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

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밁
             Ś
                             Query Match
Best Local S
Matches 14
         691 CTCCCGGGTTCAAG 704
17
                              14;
                                      Similarity
CTCCCGGGTTCAAG
                               Conservative
                                     1.4%;
 4
                               ç,
                                     Score 14;
Pred. No.
                                Mismatches
                                      DB 1; Lo
1.9e+03;
                                              Length 17;
                                Indels
                                0
                                Gaps
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0

K K K RESULT 2348 ACC84459/c ACC84459 ACC84459 standard; DNA; 42 ВP

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ACC84454/c
ID ACC844
XX
AC ACC844
XX
DT 28-AUG
DX NTP pe
XX
CYtost
KW Cytost
KW neural
XX
OS Uniden
XX
PN WO2003
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                                                                                                                                                                                                                                              RESULT 2349
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a neural thread protein (NTP) peptide referred to as cell death peptide. Thought to be cytostatic, antibacterial, immunosuppressive and antiinflammatory. It is useful for treating a condition in a patient requiring removal or destruction of cells, for treating a condition such as benign or malignant tumor, inflammatory disease, autoimmune disease and infectious disease. The peptide useful for treatment is derived from the amino acid sequence for a pancreatic thread protein. The peptide is conjugated, linked or bound to a molecule chosen from antibody or its fragment, antibody-like binding molecule, where the molecule has a higher affinity for binding to a tumor or other target than binding to other cells. Treatment using NTP peptides can remove benign tumors with less risk and fewer of the undesirable side effects of surgery. The present sequence is an NTP encoding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel neural thread protein peptide, referred as cell death peptide, useful for treating prostatic hyperplasia, psoriasis, eczema, dermatosis, atherosclerosis, cosmetic modification to skin, throat, mouth, muscle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUL-2001; 2001US-0306150P
19-JUL-2001; 2001US-0306161P
16-NOV-2001; 2001US-0331477P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytostatic; Antibacterial; neural thread protein; NTP;
                                                                                                                                                                                                              ACC84454 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 17; 77pp; English.
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P-PSDB; ABR63254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-AUG-2003
    WO2003008443-A2.
                                  Unidentified
                                                                                 Cytostatic;
                                                                                                               NTP peptide
                                                                                                                                                28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JUL-2002; 2002WO-CA001105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (NYMO-) NYMOX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide encoding sequence
                                                                                                                                                                                                                                                                                                                          534 CCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACCAAAGA 571
                                                                                                                                                                                                                                                                                            39
                                                                atic; Antibacterial; Immunosup
thread protein; NTP; tumour;
                                                                                                                                                                                                                                                                                                                                                          l Similarity
23; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                            CCTGTAGTCCCAGCTACTCAGGAGGCTGGGGGCAGGAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                        B₽;
                                                                                                               encoding sequence #1.
                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ntibacterial; Immunosuppressive; Antiinflammatory;
protein; NTP; tumour; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                         6 A;
                                                                                                                                                                                                                                                                                                                                                                         1.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                        16 C; 11 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                              60
                                                                Immunosuppressive; Antiinflammatory;
; tumour; ds.
                                                                                                                                                                                                                                                                                                                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                         Score 14; DB 1;
Pred. No. 2.3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #6.
                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                                                                                                                                          Length 42;
                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                            Gaps
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AAT81185/c
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a neural thread protein (NTP) peptide referred to as cell death peptide. Thought to be cytostatic, antibacterial, immunosuppressive and antiinflammatory. It is useful for treating a condition in a patient requiring removal or destruction of cells, for treating a condition such as benign or malignant tumor, inflammatory disease, autoimmune disease and infectious disease. The peptide useful for treatment is derived from the amino acid sequence for a pancreatic thread protein. The peptide is conjugated, linked or bound to a molecule chosen from antibody or its fragment, antibody-like binding to a tumor or other target than binding to other cells. Treatment using NTP peptides can remove benign tumors with less risk and fewer of the undesirable side offers of fearners.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUL-2001;
19-JUL-2001;
16-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel neural thread protein peptide, referred as cell death peptide, useful for treating prostatic hyperplasia, psoriasis, eczema, dermatos atherosclerosis, cosmetic modification to skin, throat, mouth, muscle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 60 BP; 9 A; 21 C; 15 G; 15 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Averback
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2003
                            18-MAY-1994;
13-JAN-1995;
                                                                                                                                                                                                              Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
                                                                                                                                                                                                                                                          Human c-myb hammerhead ribozyme target sequence (nt. position 1246).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  effects of surgery. The present sequence is an NTP encoding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 15; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-247999/24.
P-PSDB; ABR63249.
                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                               coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                      AAT81185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       XOMAN (-OWAN)
                                                                                                       23-NOV-1995
                                                                                                                                      WO9531541-A2
(RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                534 CCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACCAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity 60.5
23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 57
                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGTAGTCCCAGCTACTCAGGAGGCTGGGGCAGGAGA
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2001US-0306161P.
2001US-0331477P.
                                                                                                                                                                                                                                                                                        (first entry)
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                            94US-00245466.
95US-00373124.
                                                                          95WO-US006368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.4%;
                                                                                                                                                                                                                                                                                                                                                    RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14; DB 1;
Pred. No. 1.9e+03;
0; Mismatches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                               571
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ARTSULT 2351
AAT43035/c
ID AAT4303
XX AAT4303
XX Juvenil
XX Microsa
KW Microsa
KW Microsa
KW Polymer
XX Synthet
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XX W096332
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Microsatellite; genetic marker; screening; polymerase chain reaction; juvenile glaucon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT43035 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents the preferred target sequence for enzymatic nucleic acid, especially a hammerhead ribozyme, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tor treating
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT43035;
                                                        Detecting pre-disposition to juvenile glaucoma specific micro:satellite markers on chromosome region defined by these markers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Juvenile glaucoma marker afm278ye5 upstream amplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-JUN-1997
                                                                                                                                                                            WPI; 1996-485791/48.
                                                                                                                                                                                                                                                                                      (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                            18-APR-1995;
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                                                                                                                                                                                                                              ŗ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                               95FR-00004590
                                                                                                                                                                                                                                                                                                                                                                                                    96WO-FR000592
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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/note=
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"linked to JOE fluorochrome label"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 13.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              glaucoma; predisposition;
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    from presence
    1q21q31, also D

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                                                                                            also DNA from
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Bousser M,

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WPI; 1997-322151/30. Tournier-Lasserve

Indirect genotypic diagnosis of CADASIL (within a 2 cM interval) to the mutated

CADASIL - uses markers genetically linked

gene.

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13pp;

English

Example;

Page

7; 25pp; French

CADASIL. The method involves the use of markers genetically linked to the mutated gene responsible for CADASIL in order to detect whether or not the tested individual is carrying the chromosome 19 marker alleles that have been linked to the disease gene in this given family and to estimate his carrier risk, characterised in that the method is based on the localisation of the gene in the interval of 2 cM spanned by the flanking markers D195226 and D195199 and in that one uses at least 2 markers located each on one side of the gene. The present sequence represents a flanking nucleotide sequence of a new D195841 marker. The method is used for diagnosis of CADASIL and to estimate carrier risk in a given family. Two new microsatellites D195841 and 11547 have been identified and mapped

estimate

d by

A novel method has been developed for indirect genotypic diagnosis of CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy) for symptomatic or at risk individuals or foetuses belonging to a family suspected or known to be affected by

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XSSSSSSSXXX
 Matches
                 Query Match
Best Local
                                                                                                      Predisposition to juvenile glaucoma is detected by characterising the following microsatellite markers on chromosome 1q21q31 associated with occurrence of juvenile glaucoma: afm359yh1, afm22x33, ngal; afm21; afm248wg5; afm278ye5; afm21xxb10; afm157xe7 and NGA5. An oligonucleotide primer of the present sequence was used with a primer having the sequence given in AAT43036 to amplify the afm278ye5 marker. Apart from detecting predisposition to disease, the microsatellites should allow localisation, and thus isolation, of the gene involved in juvenile glaucoma
                                                                         Sequence 17 BP; 4 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
al Similarity
15; Conserv
   Conservative
                   1.4%;
 <u>,</u>
                         Pred.
                                        Score 13.8;
   Mismatches
                         ŏ.
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     Indels
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밁 S

17

GGCTCAATCTCGGCTCA 1

961 GGCCAAATCTCGGCTCA 977

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RESULT 2
AAT85611
                                                                                                                                                                                                                     CADASIL; marker; mutation; detection; genotypic diagnosis; chromosome 19; microsatellite; genotyping; subcortical infarct; cerebral autosomal dominant arteriopathy; leukoencephalopathy; ss.
21-DEC-1995;
                                         21-DEC-1995;
                                                                               25-JUN-1997.
                                                                                                                       EP780478-A1
                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                     CADASIL mutation detection marker D198841 flanking nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                              24-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                    AAT85611;
                                                                                                                                                                                                                                                                                                                                                                                                                            AAT85611 standard; DNA; 17
                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2352
                                                                                                                                                            sapiens
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  95EP-00402910
                                       95EP-00402910
                                                                                                                                                                                                                                                                                                                                              entry)
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ព្រព្ឋពន្ធន
                                                        RESULT 2353
AAX69800
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                                                                                             The present invention describes nucleic acid molecules which modulate t synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            within the 2 cM interval. These very highly polymorphic markers are located very close to the gene within this interval. Their use in the diagnostic method according to the invention will further increase it accuracy and safety
                                                                                                                                                                                                                                                                Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vascular endothelial growth factor receptor; VEGF receptor; flt-1; fl KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid archritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                         26-OCT-1995;
11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human flt1 VEGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-1999
                                                        Sequence
                                                                                                                                                                                                                                       Claim 4; Page 79; 218pp; English.
                                                                                                                                                                                                                                                                                                                         WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                      Pavco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX69800 standard;
              Local
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                                                                                                                                                                                                                                                                                                                                                                                RIBOZYME PHARM INC. CHIRON CORP.
              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                     Mcswiggen J,
                                                       B₽;
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  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96WO-US017480
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor hammerhead ribozyme substrate
                                                                                   molecules from the present invention
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             1.4%;
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                                                                                                                   Sequence 17 BP; 1 A; 2 C; 2 G; 0 T;
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tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
fms-like tyrosine kinase 1; kinase insert domain containing receptor;
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                                                                                                                                                                                                                                                                                                                                                 tobacco;
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canola plant;
                                                                                                                                                                                                                                                                                                                                                                                                                           substrate;
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XALAXERARARASSOSSOSSOSSOS

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ARESULT 2358
AAX63010
ID AAX6301
XX AAX6301
XX Delta-9
XX Maize;
KW Maize;
KW Granule
KW modulat
KW fruit x
XX Zea may
N W097103
XX Zea may
XX III-JUL-
XX (RIBO-)
PA (DWC)
XX Zwick PI Young S
XX WPI; 19
XX PI Ribozym
PT Ribozym
PT Ribozym
PT Ribozym
PT Maize o
XX
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Delta-9 desaturase. (I) can be used to modulate expression of a granule bound starch synthase (BBSS) preferably Delta-9 desaturase or a granule bound starch synthase (BBSS) gene, in a plant (preferably a maize or canola plant). (I) can be used to modulate caffeine synthesis in a coffee plant, nicotine production in a tobacco plant, fruit ripening processes in an apple, tomato, pear, plum or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or marigold plant or lignin production in a tobacco, aspen, poplar or pine
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Young
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes an enzymatic nucleic acid molecule (I) with RNA cleaving activity, which modulates the expression of a plant gene. Also described is a gene comprising a cDNA sequence encoding maize Delta-9 desaturase. (I) can be used to modulate expression of a gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        maize or canola.
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                                                                                                                                                                                                                                                                                                                                                           modulation; gene expression; transgenic plant; cleavage; canola plant; caffeine synthesis; coffee plant; nicotine production; tobacco;
                                                                                                                                                                                                                                                                                                                                                                                               granule
                                                                                                                                                                                                                                                                                                                                                                                                                                        Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:885.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX63010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX63010 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression of DELTA-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme which modulates
                                                                                                                                                                                               13-JUL-1995;
                                                                                                                                                                                                                           12-JUL-1996;
                                                                                                                                                                                                                                                            20-MAR-1997
                                                                                                                                                                                                                                                                                       WO9710328-A2
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                                                                                                                                                                  (RIBO-)
                                                                          1997-202224/18
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                                                                                                      SA MG
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                                                                                                                                                                                                                                                                                                                                                  ripening;
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                                                                                                                                                                  RIBOZYME PHARM INC.
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                                                                                                                                                    DOWELANCO.
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                                                                                                      Edington Folkerts
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                                                                                                                                                                                                                                                                                                                                                                                                          Zea mays; delta-9 desaturase; GBSS; target; substrate;
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                                                                                                                                                                                                                                                                                                                                                                                               starch
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                                                                                                      1 BE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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desaturase or
                                                                                                                                                                                                                                                                                                                                                pigmentation;
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                                                                                                      Mcswiggen
Merlo DJ;
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Merlo DJ;
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Pred. No. 1.9e+03;
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                                                                                                                      Merlo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                           ribozyme;
                                                                                                                      PAO,
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d starch synthase in
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                                                                                                                                                                                                                                                                                                                                                                                           hairpin ribozyme;
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Ribozyme which modulates plant gene expression of DELTA-9 desaturase or maize or canola.

expression - p

preferably modulates d starch synthase in

d mutations in a cell

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RESULT 2359
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ID AAV9538
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AC AAV9538
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                ribozymes, respectively, which specifically cleave human c-fos. AAV95261 to AAV95400 and AAV95585 to AAV95628 represent human c-fos target sequences. The enzymatic nucleic acid molecules can be used for treating cancer associated with elevated levels of c-fos oncogene, especially leukaemias, neuroblastomas and lung, breast and colon cancers. The ribozymes may also be used as diagnostic tools to examine genetic drift and mutations within diseased cells, or to detect the presence of c-fos
                                                                                                                                                                                                        The present invention describes an enzymatic nucleic acid molecule which specifically cleaves RNA derived from a c-fos gene. AAV95401 to AAV95540 and AAV95541 to AAV95584 represent hammerhead ribozymes and hairping and hairpin
                                                                                                                                                                                                                                                                                                                                                                       Enzymatic nucleic acid molecules which specifically cleave from a c-fos gene - useful for treating conditions related -fos, especially cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17
                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-427942/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-JAN-1997;
24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; c-fos; hammerhead ribozyme; hairpin ribozyme; target site; cancer; oncogene; leukaemia; neuroblastoma; diagnosis; genetic drift; mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human c-fos target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-FEB-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jarvis
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                                                                                                                                                                                                                                                                                                                          Page 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen
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97US-00998099
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                                                                                                                                                                                                                                                                                                                          English.
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RESULT 2360
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ID AN97762/c
ID AN97766/c
XX AAV9776
XX Human;
KW Human;
KW Human;
KW Hammerh
KW Cancer;
XX
WO98338
XX
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Best Local
                                                                                                          Matches
                                                                                                                                                                                                                                                         The present invention describes enzymatic nucleic acid molecules (NAMs) which specifically cleave RNA derived from an epidermal growth factor receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090 represent specifically claimed target sequence from human EGF-R. AAV98067 to V9878 represent hammerhead ribozymes and hairpin ribozymes respectively for human EGF-R. The NAMs are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit cell proliferation in the prevention or treatment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JAN-1997;
04-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV97762 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 5; Page 79; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-437449/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hammerhead ribozyme; hairpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV97762;
                                                                                                                                                                                                               Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYAS-) UNIV ASTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              730 GTAGCTGGGACTACAGG 746
                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EGF-R target sequence nucleotide position 4295.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 GCAGCTGGGAGTACAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          epidermal growth factor receptor; EGFR; EGF-R; target sequence;
nead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S, Fell P,
                                                                                                       l Similarity
15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genetic
                                                       CTGAGATCAAGCATCCT 536
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                               BP; 4
                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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97US-00985162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US000730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                drift; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽,
                                                                                                                                                                                                                 P
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                                                                                                                             1.4%;
88.2%;
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                                                                                                                                                                                                               3 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;
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                                                                                                          <u>.</u>
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Pred. No. 1.9e+03;
                                                                                                                                   Score 13.8; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mutation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                            Length 17;
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                                                                                                          Gaps
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RESULT 2362 AAV95124/c ID AAV9512 XX AC AAV9512

AAV95124 standard; RNA; 17

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AAV95124

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AAV48871

ID AAV4

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AC AAV4

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                                                                                                                                                                                                                                                                                      CC ExbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in CC significant reduction in ExbB-2 protein expression, while coligonucleotides AAV48792-886 had little effect. The oligonucleotides CC oligonucleotides AAV48792-886 had little effect. The oligonucleotides CC exemplify the invention. The specification describes oligonucleotides CC can each form three hydrogen bonds to cytosine; do not contain four CC consecutive mucleotides able to form three H-bonds each to four CC consecutive cytosines; do not contain three H-bonds each to four CC consecutive each able to form three H-bonds to three consecutive CC cytosines, and the ratio between residues able to form two H-bonds cach cytosines, and the ratio between residues able to form two H-bonds each CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The CC oligonucleotides are used to modulate expression of genes, particularly CC che genes for p53, Exb-2, junB, junD, TGF-beta 1 or beta 2 to control CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The CC cligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases CC of cancer or (targeting TGF) for stimulating the immune system
                                                                                       Matches
                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ErbB-2 gene antisense oligonucleotide ErbB-2-N-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV48709-886 represent antisense oligonucleotides directed against the ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schlingensiepen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ErbB-2; antisense oligonucleotide; modulate; gene expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-OCT-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-AUG-1998
                                                                                                                                                                                                                               Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lomo sapiens
                     434
                                                                                       15;
                                                                                                                            Similarity
TTTATTTTTTTTAAGAC 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fig 6d; 286pp; English.
                                                                                       Conservative
                                                                                                                                                                                                                           BP; 10 A; 2 C; 1 G; 4 T; 0 U; 0 Other;
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                                                                                                                        1.4%;
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                                                                                                                                                             Score 13.8;
                                                                                                                                Pred. No. 1.9e+03
                                                                                           Mismatches
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RESULT 2363
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ID AAA2273
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XX Integri
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XX Integri
XX Human;
XW integri
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Best Local S
Matches 15
                                                                               Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           graft rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hammerhead ribozyme;
autoimmune disease; ]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-FEB-1999
                                  myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                     19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ribozymes targetted to autoimmune disease and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9824913-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-DEC-1997;
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                                                                                                                                                                                                    Integrin subunit beta 3 substrate sequence SEQ ID
                                                                                                                                                                                                                                                                                                     AAA22733 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV94575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV93889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        e.g. s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the present invention. The ribozymes can be used for the treatment e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy other inflammatory conditions. The ribozymes are also used to induce rance in a recipient to alloantigen from a donor
   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      776
                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to AAV94574 represent specifically claimed ribozymes, and to AAV95260 represent specifically claimed substrate sequ
                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTTTAGTAGAGATGG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 46; 61pp; English
                                                                                                                                                                                                                                                                                                                                                                                        ATGTTTCGTAGAGATGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptor g-chain; interleukin 2 receptor gamma chain;
ribozyme; hairpin ribozyme; substrate; expression; can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          psoriasis; allergy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin
allergies.
                                                                                                                                                                                                                                                                                                       ВP
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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    useful for treating

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            expression; cancer;
ory disease;
                                                                                                                                                                                                      NO:5959
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene ARA17157 to CC ARA17157 and ARA17561 to ARA17622 represent ribozyme sequences for ARNT, CC and ARA17156 to ARA17562 to ARA17684 represent their corresponding target sequences; ARA17685 to ARA18385 and ARA19087 to CC ARA19154 represent ribozyme sequences for Tie-2, and ARA19087 to CC ARA19154 represent ribozyme sequences for Tie-2, and ARA19087 to ARA19155 to ARA19022 represent their corresponding target sequences; CC ARA19223 to ARA20361 and ARA21501 to ARA21595 represent ribozyme cc sequences for integrin alpha 6 subunit, and ARA20362 to ARA21500 and CC ARA21596 to ARA21698 represent their corresponding target sequences; CC ARA21699 to ARA21758 and ARA23263 to ARA23342 represent ribozyme cc for integrin subunit beta 3, and ARA23476 to ARA23342 represent ribozymes of the invention are used for modulating the synthesis, expression and/or CC their propersent their corresponding target sequences. The ribozymes of integrin subunit beta 3, integrin subunit alpha-6, or Tie-2. They are CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as meaved for modulating the synthesis, vertuca vulgaris, CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber CC syndrome, Kippel-Transunav-Weber syndrome, Sturge Weber Rendu syndrome.
                                                                                                                                                                                                                                     RESULT 2364
AAA22844
                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                     AAA22844 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                    19-JUN-2000
                                                                                                                                                                                   AAA22844;
                                                                                                                  Integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            drome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu synother syndromes and diseases related to the levels of ARNT,
                                                                                                                                                                                                                                                                                                                                        536 TCCTGCCTCAGCCTCCC 552
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ribozymes for modulating the synthesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                        1 UUCUGGCUCAGCCUCCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                          17 BP; 1 A; 8 C; 3
                                                                                                                  subunit beta 3 substrate sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            subunit alpha-6,
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                                                                                                                                                    entry)
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                                                                                                                                                                                                                                                                                                                                                                                         Score 13.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                           1.9e+03
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                                                                                                                  SEQ ID NO:6070
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Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit, integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis

age related

macular degeneration;

inflammation;

neovascular

glaucoma;

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AAA22852
ID AAA2285
XX AAA2285
AC AAA2285
XX ID-JUN-
XX ID-GIN-
DT 19-JUN-
XX Integri
XX Integri
XX Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC cleaving activity, which specifically cleave RNA encoded by an aryl color process of the proc
                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes enzymatic nucleic acid molecules with RNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 54; Page 246; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-591315/50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 0 C; 4 G; 0 T; 9 U; 0 Other;
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  Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
                                                                                        19-JUN-2000
                                                                                                                                                                            AAA22852 standard; RNA; 17
                                            Integrin
                                                                                                                                    AAA22852;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                 772 TIGIATITITAGIAGAG 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ribozymes for modulating the synthesis, {\tt mRNA} encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                          μ
                                                                                                                                                                                                                                                                                                                                                                             l Similarity
7; Conserv
                                              subunit beta 3
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                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                        (first entry)
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                                            substrate sequence SEQ ID NO:6078
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                                                                                                                                                                                 ₽P
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
.9e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                  Indels
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                                                                                                                                                                                                                                                                                                                                                                                Gaps
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CC cleaving activity, which specifically cleave RNA encoded by an aryl college in the present transporter (ARNY) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNY, CC and AAA17168 to AAA17560 and AAA17623 to AAA1684 represent their CC corresponding target sequences; AAA17625 to AAA18385 and AAA19086 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19086 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18385 to AAA19086 CC CC AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19223 to AAA20361 and AAA21595 represent ribozyme sequences; CC AAA21596 to AAA21681 and AAA21691 to AAA21595 represent their corresponding target sequences; CC AAA21689 to AAA21689 to AAA22475 and AAA23342 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23342 represent ribozyme sequence CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to CAAA23422 represent their corresponding target sequences. The ribozymes of CC the invention are used for modulating the sequences. The ribozymes of contegrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to CAAA23422 represent their corresponding target sequences. The ribozymes of corresponding target sequences. They are constant sequences are constant appearance, diabetic retinopathy, age related corresponding target sequences. The ribozymes of corresponding target sequences. The ribozymes of corresponding target sequences. They are constant appearance of the properties of the properti
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel ribozymes for modulating the synthesis, of an mRNA encoding an angiogenic factors.
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes enzymatic nucleic acid molecules with RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 54; Page 246; 305pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-MAR-1998;
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Sequence 17
  BP; 4
  ₽,
  4 C; 4 G; 0 T; 5 U;
   0 Other;
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RESULT 2366
AAA22693
ID AAA2269
XX
AC AAA2269
XX
                                                                                                        Query Match
Best Local
                                                                                                 Matches
                         AAA22693 standard; RNA;
                                                                                                       Local
                                                                                810 AGGTTGATCTTGATCTC 826
                                                                  _
                                                                                                10; Conserv
                                                                  AGGAUGAUCUCGAUCUC
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                                                                                                        1.4%;
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                                                                                                         Score 13.8;
Pred. No. 1
                                                                                                   Mismatches
                                                                                                          1.9e+03;
                                                                                                                 DB 1;
                                                                                                                 Length 17;
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AAA22693

19-JUN-2000

(first entry)

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                                                                                                                 Query Match
Best Local :
                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Integrin subunit beta 3 substrate sequence SEQ ID NO:5919.
                                                                                                                                                                               Sequence 17 BP; 4 A; 0 C; 0 G; 0 T; 13 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 54; Page 236; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-591315/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-1998;
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                                                                                                                                                                                                                                                                         syndrome,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes enzymatic nucleic acid molecules with RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-MAR-1999;
                                                                                                               Local
                                                                                                                                                                                                                                                 drome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, other syndromes and diseases related to the levels of ARNT, Tie-2,
                                          429 TTTATTTTATTTTTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ribozymes for modulating the synthesis, expression and/or stability
                                                                                       Similarity
2; Conserv
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                                                                                                                                                                                                                          subunit alpha-6, or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding an angiogenic factors.
                                                                                          Conservative
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                                                                                                          1.4%;
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                                                                                                             Score 13.8; DB 1;
Pred. No. 1.9e+03;
                                                                                          Mismatches
                                                                                                                                  DB 1;
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The present invention describes enzymatic nucleic acid molecules with RNA Cleaving activity, which specifically celeave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences, AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19385 to AAA19086 cc AAA19155 to AAA12322 represent their corresponding target sequences; AAA19233 to AAA2163 and AAA21501 to AAA21595 represent ribozyme sequences; CC AAA19232 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22169 and AAA23232 to AAA23323 to AAA23324 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA233262, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA233262, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or ce specially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as nevoxascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, and other syndrome, Aibabetic retinopathy, age related consovascular sequences and diseases related to the levels of AANT, Tie-2, integrin subunit albha-6. or integrin subunit bera-3 condother syndromes and diseases related to the levels of AANT, Tie-2, integrin subunit albha-6. or integrin subunit bera-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-JUN-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 54; Page 236; 305pp; English.
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                                         integrin subunit alpha-6, or integrin subunit beta-3
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Query Match Best Local S Matches 2

Similarity 2; Conserv

1.4%; Score 13.8; DB 1; 11.8%; Pred. No. 1.9e+03;

DB 1; Length 17;

Mismatches

Indels

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Gaps

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Sequence 17

BP; 3 A; 0 C; 1 G; 0 T;

13 U; 0 Other;

RESULT 2367

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RESULT 2368
AAA22749
AAA2274
AC AAA2274
XX AAA2274
XX AAA2274
XX AAA2274
XX Human;
KW integr
KW integr
KW integr
KW age r
KW age r
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KW hamme:
KW age r
KW kippe
OS Homo
XX Hom AAA22749 standard; RNA; 17 Integrin subunit beta 3 substrate sequence SEQ ID NO:5975. 19-JUN-2000 (first entry ₽₽

myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; integrin alpha 6 subunit; incey.... cytostatic; antidiabetic; hammerhead ribozyme; angiogenic factor; cytostatic; antipsoriatic; hommerhead ribozyme; antianflammatory; antiarthritic; antipsoriatic; pophthalmologic; antiinflammatory; arthritic retinopathy; arthritics Human; aryl hydrocarbon nuclear integrin subunit beta 3; hairpin angiogenesis; ribozyme;

WO9950403-A2

07-OCT-1999

24-MAR-1999; 99WO-US006507

27-MAR-1998; 98US-0079678P

(RIBO-) RIBOZYME PHARM INC

Jarvis T, Coeshott ú Mcswiggen

WPI; 1999-591315/50

ribozymes for modulating the synthesis, mRNA encoding an angiogenic factors. expression and/or stability

Claim 54; Page 240; 305pp; English.

CC cleaving activity, which specifically cleave RNA encoded by an aryl color hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC carafyl167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC carresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC carresponding target sequences for Tie-2, and AAA18386 to AAA19086 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC aAA19154 represent adapta 6 subunit, and AAA21859 represent ribozyme sequences; CC AAA19233 to AAA20361 and AAA21801 to AAA21859 represent ribozyme cc sequences for integrin alpha 6 subunit, and AAA2032 to AAA21800 and CC AAA21896 to AAA22475 and AAA23263 to AAA21800 and AAA21809 to AAA22475 and AAA23263 to AAA21802 to AAA21800 and CC AAA21899 to AAA22475 and AAA23263 to AAA21802 are present ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA23262, AAA23343 to CC CAA23422 represent their corresponding target sequences; CC CAA23422 represent their corresponding target sequences of CC contegrin subunit beta 3, and AAA23476 to AAA23262, AAA23343 to CC contegrin subunit beta 3, integrin subunit alpha-6, or Tie-2. They are CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as consisting processed and consisting vertica vulgaris, consisting vertical subunit solutions of tuberous sclerosis, pot-wine stains, Sturge Weber and consisting vertical subunit sclerosis, pot-wine stains, Sturge Weber and consisting vertical subunit sclerosis subunit sclerosis sclerosis stains. The present invention describes enzymatic nucleic acid molecules with RNF syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, subunit alpha-6,

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl kydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CQ AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CQ and AAA1758 to AAA17680 and AAA17682 to AAA1884 represent their CQ corresponding target sequences; AAA17685 to AAA1885 and AAA19087 to CQ AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 cand AAA19222 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CQ AAA19154 represent alpha 6 subunit, and AAA21362 to AAA21500 and CQ sequences for integrin alpha 6 subunit, and AAA2362 to AAA21500 and CQ AAA21965 to AAA21688 represent their corresponding target sequences; CQ AAA21966 to AAA21688 represent their corresponding target sequences; CQ AAA21966 to AAA22475 and AAA23263 to AAA23343 to CQ AAA2189 to AAA22475 and AAA22476 to AAA23262, AAA33343 to CQ AAA23422 represent their corresponding target sequences for integrin subunit beta 3, and AAA22476 to AAA23262, AAA33343 to CQ AAA23422 represent their corresponding target sequences of the invention are used for modulating the synthesis, expression and/or Stability of an mRNA encoding angiogenic factor, especially ARNT, CQ integrin subunit beta 3, integrin subunit alpha 6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related composition of tuberous sclerosis, pot-wine stains, Sturge Weber angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber angiotibroma of tuberous sclerosis, pot-wine stains, sturge weber angiotibroma of tuberous sclerosis.

Claim 54; Page 244; 305pp; English.

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RESULT 2369
AAA22825
Query Match
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Matches
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tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; AKWU; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis age related macular degeneration; inflammation; neovacities glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; phthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
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                                                                                                                                                                                                                                                                                                                         expression and/or stability
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RESULT 2370
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ADA2273
ADA2273
CC ADA2215
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CC AD
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                           The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl chydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17563 to AAA17653 to AAA17684 represent their corresponding target sequences; AAA17655 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19086 to AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19154 represent alpha 6 subunit, and AAA20361 and CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23263 to AAA23363 to AAA23363 to AAA23422 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to CAA21689 to AAA22475 and AAA23263 to AAA23363 to AAA23363, AA
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ribozymes for
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Pred. No. 1.
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L.9e+03;
   alpha-6,
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Best Local 9
cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17361 to AAA17622 represent ribozyme sequences for RNT, and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 to AAA19222 represent their corresponding target sequences; AAA19155 to AAA19222 represent their corresponding target sequences; AAA19155 to AAA2361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA2362 to AAA21500 and AAA21596 to AAA22475 and AAA23363 to AAA23342 represent ribozyme sequences; AAA21596 to AAA22475 and AAA23363 to AAA23342 represent ribozyme sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well a neovascular glaucoma, myopic degeneration, psoriasis, verruca vulge angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome and diseases related to the levels of ARNT, Tientegrin subunit alpha-6, or integrin subunit beta-3
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                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes enzymatic nucleic acid molecules with RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 245; 305pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to AAA23422 represent their corresponding target sequences. The ribozymes the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiotibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; 85.

Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; 85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Integrin subunit beta 3 substrate sequence SEQ ID NO:6080.
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                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC
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nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA;
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                                                                                                                                                                   an angiogenic
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                                                                                                                                                                                                                                                  Mcswiggen JA;
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA171367 and AAA17661 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17660 and AAA17625 represent represent their corresponding target sequences; AAA17685 to AAA18885 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18886 to AAA19086

The present cleaving act hydrocarbon a

invention describes enzymatic nucleic acid molecules with RNA tivity, which specifically cleave RNA encoded by an aryl nuclear transporter (ARNT) gene, an integrin subunit beta 3

Novel of an

ribozymes for modulating the mRNA encoding an angiogenic i

synthesis, factors.

expression and/or stability

Claim

54;

Page

254; 305pp; English

WPI; 1999-591315/50.

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₽A,

Roberts E,

Jarvis T,

Coeshott

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Mcвwiggen JA;

27-MAR-1998;

98US-0079678P 99WO-US006507

(RIBO-) RIBOZYME PHARM INC.

24-MAR-1999;

Claim

54; Page 246; 305pp; English.

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RESULT 2373
AAA22971/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC and AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21590 and CC AAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA2475 and AAA2363 to AAA2342 represent ribozyme sequence CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence CC AAA2162 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as CC encyascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, CC and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiotibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; 88. kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A; 6 C; 2 G; 0 T; 6 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
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Claim 54; Page 236; 305pp; English

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CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC corresponding target sequences; AAA17685 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 CC AAA19123 to AAA21922 represent their corresponding target sequences; CC AAA19223 to AAA21861 and AAA21501 to AAA21555 represent ribozyme cC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and CAA21596 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22168 represent their corresponding target sequence cC for integrin subunit beta 3, and AAA2376 to AAA23362, AAA23343 to CAAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or CC stability of an mRNA encoding angiogenic factor, especially ARNT, CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as cc especially comes of tuberous sclerosis, port-wine stains, Sturge Weber CC syndrome, Kippel-Trenaunay-Weber syndrome, Soler-Weber-Rendu syndrome, CC and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammator, neovascular glaucoma; myopic degeneration; portiasis; verruca vulgaris, angiofibroma; tuberous sclerosis; pot wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber, Rendu syndrome; ss.
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                                                                                                                                                                                                Coeshott C,
                                                                                                                                                                                                Mcswiggen JA;
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The present invention describes enzymatic nucleic acid molecules with RNA Cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CAAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA1385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC and AAA19155 to AAA21922 represent their corresponding target sequences; AAA17685 to AAA1385 and AAA19086 co AAA19155 to AAA21961 and AAA21591 to AAA2195 represent being corresponding target sequences; CC AAA19232 to AAA2168 represent their corresponding target sequences; CC AAA1889 to AAA2168 represent their corresponding target sequences; CC AAA21889 to AAA22475 and AAA21854 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23342 represent ribozyme sequence CC AAA21889 to AAA22475 and AAA23425 to AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or cc stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are ceptually used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psorlasis, verruca vulgaris, and other syndrome, and diseases related to the levels of ARNT, Tie-2, integrin subunit beta-3 critegrin 
Sequence 17 BP; 3 A; 0 C; 1 G; 0 T; 13 U; 0 Other;
                                                                         integrin subunit alpha-6, or integrin subunit beta-3
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RESULT 2375 AAA22822 Query Match 1.4%; Best Local Similarity 11.8%; Matches 2; Conservative 13 AAA22822 standard; RNA; 19-JUN-2000 427 UUGUUAUUUUAUUUUAU 17 TTTTTATTTTATTTTT 443 (first entry) 13; Score 13.8; DB 1; Pred. No. 1.9e+03; Mismatches Indels 0 Gaps

Length 17;

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Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss. WO9950403-A2

Integrin subunit beta 3 substrate sequence SEQ ID NO:6048.

24-MAR-1999; 99WO-US006507

98US-0079678P

(RIBO-) RIBOZYME PHARM INC

Roberts E, Jarvis T, Coeshott 'n Mcswiggen JA;

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ribozymes for modulating the synthesis, expression and/or stability mRNA encoding an angiogenic factors.

an angiogenic

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Claim

54;

Page 244; 305pp; English

WPI; 1999-591315/50

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AAA22964/c
ID AAA229
XX AAA229
XX AAA229
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XX Integr
XX Human;
KW Human;
KW Hittegr
XW Hommen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               corresponding target sequences; AAA1385 and AAA1987 to AAA1986 carresponding target sequences; AAA1985 to AAA18385 and AAA1987 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA20361 and AAA21501 to AAA21559 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; AAA21596 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related cespecially used to treat cancer, diabetic retinopathy, age related compounds of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Reber syndrome, Osler-Weber-Rendu syndrome, and other syndrome, osler-Weber-Rendu syndrome, and other syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
                                                                                                                                                                                                                                           Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot wine stain; Sturge Weber Syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA22964 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-JUN-2000
                                                                                                                                                                                                                             Kippel-Trenaunay-Weber
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Integrin subunit beta 3 substrate sequence SEQ ID NO:6190.
       27-MAR-1998;
                                                    24-MAR-1999;
                                                                                               07-OCT-1999
                                                                                                                                         WO9950403-A2
                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l Similarity
11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCGGCTCACTGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UUUCAGCUCACUGCAAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
    98US-0079678P
                                                    99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 C; 2 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 13.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .9e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                    syndrome; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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CC cleaving activity, which specifically cheeve knw encourable muclear transporter (ARNT) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA1756 to AAA17563 and AAA1763 to AAA17684 represent their CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC and AAA191222 represent their corresponding target sequences; AAA17685 to AAA19123 to AAA21361 and AAA21501 to AAA21595 represent ribozyme CC AAA19123 to AAA21688 represent their corresponding target sequences; AAA12823 to AAA21688 represent their corresponding target sequences; CC AAA21696 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA22475 and AAA23263 to AAA2342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23622, AAA23343 to CC AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating target sequences. The ribozymes of the invention are used for modulating target sequences. The ribozymes of corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or corresponding target sequences. The ribozymes of corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or corresponding target sequences. The ribozymes of the corresponding targ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel ribozymes for modulating the synthesis, of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pavco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54; Page 253; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ent invention describes enzymatic nucleic acid molecules with RNA activity, which specifically cleave RNA encoded by an aryl
                                                     subunit alpha-6, or integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Coeshott C,
                                                               subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen JA;
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          Ś
                          Query Match
Best Local S
Matches 15
             355
17
                           15;
                                  Similarity
        CTGAGCTCAAGCAGTCC
CTGGGCTCAAGCAATCC 1
                          Conservative
                                  1.4%;
             371
                           0;
                                  Score 13.8;
Pred. No. 1.
                             Mismatches
                                  .9e+03
                                          멂
                                          <u>,</u>
                             <u>ب</u>
                                         Length
                             Indels
                                          17;
                             0
                             Gaps
                             0
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Sequence 17

B₽;

3 A;

4 C; 6 G; 0 T; 4 U; 0 Other;

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RESULT 2377
AAA22974/c
Integrin subunit beta 3 substrate sequence SEQ ID NO:6200
                                                                                 19-JUN-2000
                                                                                                   AAA22974 standard; RNA; 17
                                                                                 (first entry)
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Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipooriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss

WO9950403-A2 Homo sapiens

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AAA22731
ID AAA;
XX
AC AAA;
XX
DT 19-;
XX Int;
XX Int;
XX Int;
XX Int;
XX Int;
XX deri
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                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Sim
Matches 15;
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antiporiatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss.

Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA21586 to AAA21688 represent their corresponding target sequences;
AAA21589 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
AAA23422 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARNT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
angiofibroma of tuberous selerosis, pot-wine stains, Stuge Waber
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
and other syndromes and diseases related to the levels of ARNT, Tie-2,
and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17563 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18385 to AAA19086 and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA19223 represent their corresponding target sequences; AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel
of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17
                                                                                                                                                                                                                                                              19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                AAA22731 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present
                                                                                                                                                                                                                  Integrin subunit beta 3 substrate sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ribozymes for modulating the synthesis, expression and/or stability {\tt mRNA} encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54; Page 254; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    subunit alpha-6, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTTTGTATTTTTAG 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activity, which specificall
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTTTTAATTTTAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 13 A; 1 C; 0 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0079678P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  enzymatic nucleic acid molecules with RNA ically cleave RNA encoded by an aryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13.8;
No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                  SEQ ID NO:5957
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
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RESULT 2379
AAA2273
ID AAA2273
XX AAA2273
AC AAA2273
XX IP-JUNXX INtegri
XX Human;
KW Human;
KW Hammerh
KW hammerh

(first entry)

AAA22738 standard; RNA; 17

Integrin 19-JUN-2000 AAA22738;

subunit beta 3 substrate sequence

SEQ ID NO:5964.

Human, aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

맑 S

Query Match
Best Local Similarity
Matches 10; Conserv

1004 GCGATTCTCCTGTCTCA 1020

Conservative

5 **

58.8%;

Score 13.8; Pred. No. 1 Mismatches

1.9e+03 В

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Length Indels

٥,

Gaps

0

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The present invention describes enzymatic nucleic acid molecules with RNA CC cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17620 and AAA17685 to AAA17684 represent their CC corresponding target sequences. AAA17685 to AAA18385 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19386 to AAA19086 CC and AAA19155 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21931 and AAA21501 to AAA21555 represent ribozyme CC AAA19122 to AAA21501 and AAA21501 to AAA21555 represent ribozyme and CC AAA19123 to AAA21503 and AAA21501 to AAA21559 represent ribozyme sequences; CC AAA19123 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA21688 represent their corresponding target sequences; CC AAA21689 to AAA2265 and AAA2363 to AAA2363 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA2362, AAA22343 to AAA23422 represent their corresponding target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or CC exhality of an mRNA encoding angiogenic factor, especially ARNT, CC expecially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARND), inflammation, and arthritis as well as conjustively and tuberous sclerosis, pot-wine stains, Sturge Weber CC syndrome. Vinnel-Treaumany-Weber syndrome. Osler-Weber-Rendu syndrome.
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 54; Page 239; 305pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-OCT-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                    drome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu synother syndromes and diseases related to the levels of ARNT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ribozymes for modulating the synthesis,
    17
                                          subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding an angiogenic
  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US006507
  2 A;
  5 C; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
  G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coeshott
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              factors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen
                                                                                          syndrome,
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AAA22754
ID AAA;
XX
AC AAA;
XX
AC AAA;
XX
DT 19-,
XX
Int
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Integrin

subunit beta 3 substrate sequence SEQ ID NO:5980

AAA22732 ID AAA2 XX

AAA22732 standard; RNA; 17

ВP

RESULT 2381

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AGGCTGGTCTCGAACTC 224

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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to CC CARA19184 represent ribozyme sequences for Tie-2, and AAA19087 to CC CAAA19125 to AAA19222 represent their corresponding target sequences; CC AAA17685 to AAA19223 to AAA21961 and AAA21501 to AAA21855 represent ribozyme sequences; CC AAA21823 represent their corresponding target sequences; CC AAA21823 to AAA21868 represent their corresponding target sequences; CC AAA21869 to AAA21688 represent their corresponding target sequences; CC AAA21869 to AAA22475 and AAA21801 to AAA23422 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA2362, AAA2343 to CC AAA23422 represent their corresponding target sequences corresponding target sequences of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as meovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ARNT, Tie-2, and integrin subunit beta-3.
Matches
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                                                                                                                                                                 Sequence 17
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llarity 58.8%;
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Query Match Best Local Similarity

1.4%;

Score 13.8; DB 1; Pred. No. 1.9e+03; 3; Mismatches 2

DB 1;

Length 17; Indels

0,

Gaps

0

Conservative

Sequence 17 BP; 2 A;

9 C; 2 G; 0 T; 4 U; 0 Other;

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RESULT 2383
AAA22752
ID AAA2275
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                                                                                                                          Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                           AAA22752;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA22752 standard;
                                                                            myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss
                                                                                                                                                                                                                                                                                                                 Integrin subunit beta 3 substrate sequence SEQ ID NO:5978.
sapiens
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WPI; 1999-591315/50 ribozymes for modulating Roberts E, Jarvis H the Coeshott synthesis, Ç Mcswiggen

98US-0079678P 99WO-US006507

mRNA encoding an angiogenic expression and/or stability

Claim 54; Page 240; 305pp; English

Novel ribozymes for

an mRNA encoding

an angiogenic

factors

modulating the synthesis,

expression and/or stability

Claim 54; Page 246; 305pp; English.

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their CC corresponding target sequences; AAA17635 to AAA1985 and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to CC AAA19234 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19155 to AAA19222 represent their corresponding target sequences; CC AAA19223 to AAA21631 and AAA21501 to AAA2155 represent ribozyme cC AAA19223 to AAA21688 represent their corresponding target sequences; CC AAA19223 to AAA22168 represent their corresponding target sequences; CC AAA1968 to AAA21688 represent their corresponding target sequences; CC AAA1968 to AAA22475 and AAA2363 to AAA2373 represent ribozyme sequence for integrin subunit beta 3, and AAA2376 to AAA23362, AAA23343 to CC aAA23422 represent their corresponding target sequences. The ribozyme of the invention are used for modulating the synthesis, expression and/or CC especially used to treat cancer, diabetic retinopathy, age related CC macular degeneration (ARMD), inflammation, and arthritis, as well as correspondence, kippel-Trenaunay-Weber syndrome, Sulrye Weber CC and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit alpha-6, or integrin subunit alpha-6, or integrin subunit alpha-6, or integrin subunit beta-3 The present invention describes enzymatic nucleic acid molecules with cleaving activity, which specifically cleave RNA encoded by an aryl RNA

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl coarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 cg gene, an integrin alpha 6 subunit gene, or a Tie-2 gene Aniform to capture and Analform to CC corresponding target sequences; Analform to Analform to CC and Analform to Analform to CC and Analform to Analform to CC analform to Analform their corresponding target sequences; Analform to Analform their corresponding target sequences; CC Analform their corresponding target sequences of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARM), inflammation, and arthritis, as well as

myopic degeneration,

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; anglogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
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RESULT 2385
AAA22824
ID AAA2282
XX AAA2282
XX Integri
XX Human,
XW Integri
XX Human,
XW Integri
XW Age rel
XW Cophthal
XW Coph
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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1675 to AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17663 to AAA17683 and AAA19887 to AAA18385 and AAA19887 to AAA19154 represent ribozyme sequences; AAA16885 and AAA19887 to AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19886 to AAA19155 to AAA19222 represent their corresponding target sequences; AAA1923 to AAA20361 and AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21689 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA21689 to AAA22475 and AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23342 AAA23341 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or
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Matches 6
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Pred. No. 1.9e+03;
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NT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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AAV9139
AAV9139
XX AAV9139
AC AUG-DE Human C
XX Human;
KW target;
KW target;
KW target;
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XX FOR AV-PH A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              និនិនិនិនិនិនិនិនិនិ
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Best Local S
Matches 11
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                                                                                                                                                                                                                                                                                                                                                 Jarvis T,
Parry T,
Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-NOV-1997;
19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-0CT-1997
02-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human C-raf target site nucleotide position
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV91399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV91399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAY-1998;
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                                                                                                                                                                                                  restenosis, and also new ribozymes and
                                                                                                                                                                                                                   Identifying new catalytic nucleic acid especially ribozymes that cleave Raf
                                                                                                                                                                                                                                                                                                   WPI; 1999-009494/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restenosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                           as antiviral agents and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            684 CCTCTGCCTCCCGGGTT 700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                              Beigelman L, I
J, Workman CT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bstrate; catalyst; modulation; expression; Raf gene; delivery; identification; synthesis; deprotection; purification; cancer; on; psoriasis; non-hepatic ascites; infection; genetic drift;
                                                                                                                                                                                                                                                                                                                                                                                                 Matulic-Adamic J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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97US-0056808P.
97US-0061321P.
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97US-0068212P
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97US-0049002P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA;
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                                                                                                                                                                                                                                                                                                                                              Mcswiggen of Beaudry
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Pred.
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No. 1.
                                                                                                                                                                                                                                                                                                                                                 ls M, Kisich
Karpeisky A
Sweedler D;
                                                                                                                                                                                                  that modulates selected processes RNA for treating cancer, modified nucleoside triphosphates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9e+03
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                                                                                                                                                                                                                                                                                                                                                                        Burgin
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Burgin A;
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A method has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method comprises (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising

comprising

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259pp;

English

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AAXIBJT 2387
AAXIB370
ID AAXIB377
XX AAXIB37
XX AAXIB37
XX AAXIB37
XX AAXIB37
XX AT-PCR
XX RT-PCR
XX ATP11032
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                          This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine or thymine; pamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JP11032765-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 11; 19pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptides having at least two new nucleotides - useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TAKI ) TAKARA SHUZO
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27-AUG-1998;
04-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stimulus-regulated nucleic acid; sequence profile; nucleic acid level; differentially expressed nucleic acid; disease state; cancer; autoimmune disease; infectious disease; aging; developmental disorder; proliferative disorder; neurological disorder; toxicity; primer; treatment resistance; differential expression; drug discovery; growth factor; epidermal growth factor; radiation; stress; pathogen; ss.
                                                               differentially expressed nucleic acid molecules associated with disease states, such as cancer, autoimmune disease, infectious disease, aging, developmental disorder, proliferative disorder or neurological disorder. Alternatively the methods can be used to assess the efficacy or toxicity of or a resistance to a treatment. Also the methods can be used to determine differential expression of nucleic acid molecules in response to a stimulus, e.g. a chemical, drug or growth factor (especially epidermal growth factor), radiation, stress or a pathogen. The methods can also be used to determine co-regulated genes that can be potential
                                                                                                                                                                                                                                                                                                      AAZ36739-41 represent oligo(dT) primers used for modified differential display, in the method of the invention. The specification describes a method for measuring the level of two or more nucleic acid molecules in a target. The method comprises contacting a probe with an arbitrarily or statistically sampled target and detecting the amount of specific binding of the target to the probe. The methods can be used to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anchored oligo(dT) primer ATISA used for modified differential display.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ36739;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ36739 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Measuring expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcclelland M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KIMM-) KIMMEL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Page 91; 187pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                    grrb
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98US-0098070P.
99US-0118624P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CANCER CENT SIDNEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Welsh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US009119.
                                                    discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    low abundance reduced complexity target nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trenkle T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
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Pred. No. 1.9e+03;
15 T; 0 U;
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     0 Other;
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RESULT 2389

AAA25450 standard;

DNA; 17

BP

19-JUL-2000 AAA25450

(first entry)

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                                                                                                                                The present invention describes nucleic acids (A) that interact stably CC with a target sequence and contain at least one phosphoro(di)thioate CC link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A) that modulates expression of the oestrogen receptor CC gene, are used to treat cancer (particularly of breast or endometrium), CC in vivo or by transforming cells ex vivo and implanting treated cells, or CC gecause of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, CC particularly for identification of therapeutic targets, and as research CC reagents (for RNA, in the same way that restriction endonucleases are CC used with DNA). The combination of modifications in (A) improves CC resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and CC AAA24748 to AAA25932 represent their corresponding target sequences. CC AAA25931 to AAA26107 to AAA26218 represent their corresponding target sequences. CC sequences, and AAA26107 to AAA26218 represent other ribozyme sequences and CC sequences. AAA26219 to AAA26211 represent other ribozyme sequences and CC invention
                                                              Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-013248/01.
                                                                                                                            Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acids that interact, and optionally cleave, target sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thompson JD,
Reynolds M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-1998;
23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oestrogen receptor hammerhead ribozyme target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 anticancer; breast cancer; endometrium cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
gene expression modification; cancer; phosphorothioate; endonuclease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to treat cancer.
                                 428
                                                              1 Similarity
15; Conserv
                                TTTTATTTTATTTTTT 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 79; 148pp; English
                                                                                                                              BP; 0
                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beigelman L,
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98US-00103636.
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                                                                           1.4%;
                                                                                                                              0 C; 0 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jarvis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen JA,
ris T, Woolf T,
                                                              0
                                                                               Score 13.8;
Pred. No. 1.
                                                                Mismatches
                                                                           1.9e+03
                                                                                                DB 1;
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Haeberli
                                                                                            Length 17;
                                                                Indels
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Query Match
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AATTTTTTTTTTTTT AATCTCTTTGTATTTTT 17

781 0

Conservative

1.4%;

Score 13.8; DB 1; Pred. No. 1.9e+03;

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Length 17; Indels

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Mismatches

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AAA25600
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                                                                              for other conditions associated with levels of oestrogen receptor. Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of modifications in (A) improves resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA25992 represent their corresponding target sequences. AAA26107 to AAA26107 to AAA26107 represent their corresponding target sequences and AAA26107 to AAA26218 represent their corresponding target sequences and AAA26107 to AAA26271 represent other ribozyme sequences and antiense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                with a target sequence and contain at least one phosphoro(di)thioate link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor gene, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Thompson JD, Reynolds M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-1998;
23-JUN-1998;
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Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 77; Page 84; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acids that interact,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-013248/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matulic-Adamic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      anticancer; breast cancer; endometrium cancer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Destrogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor; c-raf; k-ras; bcl-2; ribozyme;
   B₽;
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98US-00103636.
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   3 A;
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   2 C; 1 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  n L, Mcswiggen JA,
Jarvis T, Woolf T,
      1
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   T; 0 U;
   0 Other;
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Haeberli
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RESULT 2391
AAA25178
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                                                                                                                                                                                                  CC With a target sequence and contain at least one phosphoro(di)thioate CC link, having endonuclease activity. (A), and more generally any catalytic CC link, having endonuclease activity. (A), and more generally any catalytic CC nucleic acid (A) that modulates expression of the oestrogen receptor CC gene, are used to treat cancer (particularly of breast or endometrium), CC in vivo or by transforming cells ex vivo and implanting treated cells, or CC for other conditions associated with levels of cestrogen receptor.

CC Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, CC particularly for identification of therapeutic targets, and as research CC reagents (for RNA, in the same way that restriction endonucleases are CC used with DNA). The combination of modifications in (A) improves CC used with DNA). The combination of modifications in (A) improves CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and AAA25992 represent their corresponding target sequences, and AAA25997 to AAA26218 represent their corresponding target sequences. AAA26219 to AAA26211 represent their corresponding target sequences. AAA26219 to AAA26211 represent their ribozyme sequences and CC sequences. AAA26219 to AAA26211 represent other ribozyme sequences and control of the corresponding target sequences.
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                                                                                 Query Match
Best Local
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23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 77; Page 71; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acids that interact, and optionally cleave, target sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-013248/01.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 anticancer; breast cancer; endometrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
gene expression modification; cancer; phosphorothicate; endonuclease;
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                                                                                                                                     Sequence 17 BP; 2
                                                                                                                                                                              sequences. AAA26219 to AAA26271 represent other ribozyme sequences and antisense oligonucleotides used in the exemplification of the present invention
                               591
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                                                                                   Similarity
                               CTAATTTTATTTTAT 607
CTGATTTTTGTTTTAT 17
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98US-00103636.
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                                                                                                                                     A; 1 C; 2 G; 12 T; 0 U; 0 Other;
                                                                                 1.4%;
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ris T, Woolf T,
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                                                                  Score 13.8; D
Pred. No. 1.9e
0; Mismatches
                                                                                   1.9e+03;
                                                                                                    DB 1; Length 17;
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Haeberli
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RESULT 2392 AAA25603

AAA25444 ID AAA2 XX

AAA25444 standard; DNA; 17

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RESULT 2393

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                                                                  Matches
                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thompson JD, Beig
Reynolds M, Zwick
Matulic-Adamic J;
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23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acids that interact, and optionally cleave, target sequences
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                                                                                                                                    Sequence 17
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                                                                                   Local
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                               771 TTTGTATTTTAGTAGA 787
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ب
                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 84; 148pp; English.
                                                                                                                                      BP; 3 A; 1 C; 2 G; 11 T; 0 U;
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Zwick M, Jar
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                                                                  Conservative
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98US-00103636.
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                                                                                   1.4%;
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Jarvis T, Woolf T,
 17
                                                                  Score 13.8; DB 1; Length 17; Pred. No. 1.9e+03; O; Mismatches 2; Indels
                                                                                                                                          0 Other;
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Haeberli P;
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AAA25445
ID AAA2
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AC AAA2
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                                                                               RESULT 2394
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Best Local S
Matches 15
                AAA25445
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23-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothicate; endonuclease;
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                                                AAA25445 standard; DNA; 17
                                                                                                                                                                                                                                                          Sequence 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acids that interact, and optionally cleave, target sequences,
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                                                                                                                                                              162 ATTTTGTATTTTTTTT 178
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                                                                                                                                                                                             Conservative
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98US-00103636
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                                                                                                                                                                                                           1.4%;
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ris T, Woolf T,
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                                                                                                                                                                                                                                                            G; 14 T; 0 U; 0 Other;
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Pred. No. 1.
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, Haeberli
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30-JAN-2001 AAA98232; AAA98232

(first entry)

standard;

DNA; 17

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RESULT 2395
AAA98232
ID AAA9823
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AC AAA9823
XX
DT 30-JAN-
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC gene, are used to treat cancer (particularly of breast or endometrium).

CC in vivo or by transforming cells ex vivo and implanting treated cells, or CC for other conditions associated with levels of oestrogen receptor.

CC Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, CC particularly for identification of therapeutic targets, and as research CC reagents (for RNA, in the same way that restriction endonucleases are CC used with DNA). The combination of modifications in (A) improves CC resistance to nucleases, binding affinity and/or activity. AAA23503 to CAAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and CC AAA24748 to AAA25992 represent their corresponding target sequences, and CC AAA2593 to AAA26105 represent costrogen receptor hairpin ribozyme sequences and AAA26107 to AAA26271 represent other ribozyme sequences and cc antisense oligonucleotides used in the exemplification of the present incompleted in the present conversion.
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Best Local Similarity
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23-JUN-1998;
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98US-00103636.
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is T, Woolf T,
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Haeberli
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Human retrovirus HERV LTR PCR primer

#31.

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RESULT 2396
AAA50197
ID AAA5019
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AC AAA5019
AC AAA5019
XX
DT 07-NOV-
XX
DE 2'-Meth
                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel retroviral expression vector (A) CC containing DNA sequences (I) for packaging vector RNA and for cell-containing DNA sequences (I) for packaging vector RNA and for cell-containing cell-specific expression of proteins or peptides encoding by heterologous DNA CC (II). The sequences controlling cell-specific expression contain a cell-containing (HERV) DNA sequence. The invention also describes (a) mRNA and CC RNA of (A); (b) prokaryotic and eukaryotic cells containing (A); (c) cells containing (A); (c) containing a retroviral expression vector RNA derived from (A); (e) a cc method for producing the virions of (d); (f) a method for incorporating containing (A) and a packaging cell line, that contains at least one crecombinant) retrovirus construct that encodes for the packaging cel (II) into the chromosomal DNA of eukaryotic cells, preferably mammalian cells promoters with all the signal structures required for transcription in a central region within the U3-R segment, but without their disadvantages (excessive strength and limited cell specificity). Since (A) are derived from endogenous (harmless) viral sequences, they do not introduce any new contains and contains of the carea and recombination will not the carea and recombination will not the carea and recombination will not create new central sequences.
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                  viral sequences into the genome and recombination will not create new types of retrovirus. The promoters provide cell or tissue specific expression, according to which HERV they are derived from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 27; 67pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-MAR-2000; 2000WO-EP002064
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                                       07-NOV-2000
   2'-Methoxyethoxy-modified phosphorothioate oligonucleotide
                                                                             AAA50197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GSFU-) GSF FORSCHUNGSZENTRUM UMWELT & GESUNDHEI.
                                                                                                                   AAA50197 standard; DNA; 17
                                                                                                                                                                                                                                                  428
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                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  retrovirus.
                                                                                                                                                                                                                                                                                                          88.2%;
                                                                                                                                                                                                                                                                                                                          1.4%;
                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                          Score 13.8; DB 1; Length 17; Pred. No. 1.9e+03;
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Mismatches
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AAF05509

AAF05509 standard; DNA;

17 BP

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RESULT 2397
AAF05509
ID AAF0550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   primers in PCR, probes, linkers, tests on e.g. biological tissue, and as antiviral agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Preparation of mixed backbone oligomeric compounds useful as e.g. primers for diagnostic tests, involves oxidation of H-phosphonate internucleoside linkages to phosphodiester internucleoside linkages.
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"2'-methoxyethoxy modified thymidine"
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16-FEB-2001

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RESULT 2398
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enzymatic and antisense nucleic acid inhibition of repressor genes useful for producing e.g. granulocyte colony stimulating factor prointerferon alpha and erythropoletin.
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                                                      12-APR-1999;
                                                                                                                                                                                                                                                                                                       Ribozyme; erythropoietin; granulocyte colony interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF05510;
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       (RIBO-) RIBOZYME. PHARM INC
                                                                                                       11-APR-2000; 2000WO-US009721
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                                                                                                                                                                                                                                                                                                                                                                                  Hammerhead ribozyme substrate #2729.
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The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and

Off.

Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.

Blatt L,

Zwick M,

Pavco P,

Mcswiggen

<u>.</u>

WPI; 2000-647423/62

11-APR-2000; 2000WO-US009721

12-APR-1999;

99US-0129390P

(RIBO-) RIBOZYME PHARM INC.

Claim 42; Page 128; 164pp; English.

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RESULT 2399
AAF06381
ID AAF0638
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                      AAF06381;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 18;
                                                                                                                                                                                                                                                          WO200061729-A2
                                                                                                                                                                                                                                                                                                           Ribozyme;
                                                                                                                                                                                                                                                                                                                               Hammerhead ribozyme substrate #3178.
                                                                                                                                                                                                                                                                                                                                                                                        AAF06381
                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                        19-OCT-2000
                                                                                                                                                                                                                                                                                                   interferon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interferon alpha
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nes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                            165
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                                                                                                                                                                                                                                                                                                            erythropoietin;
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                                                                                                                                                                                                                                                                                                   alpha;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13.8;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                            colony stimulating
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RESULT 2401
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AC ABK0089
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Best Local S
Matches 2
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Best Local
                                                                                                                    Matches
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                                                                                                                                                                                             The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                       Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                    12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                          11-APR-2000; 2000WO-US009721
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hammerhead ribozyme substrate
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                       ABK00892 standard;
                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                    Claim 18; Page 117; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interferon alpha; ss.
  ABK00892
                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-)
                                                                                                                                                                                     interferon
                                                                                                                               Local Similarity
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                                                                                                595 TTTTTATTTTTT 611
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2; Conserv
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                                                                                                                                                                                     alpha
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                                                                                                                                                               B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry
                                                                                                                      Conservative
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                                                                                                                                                               A.
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                       RNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 C; 1 G; 0 T; 14 U; 0 Other;
                                                                                                                               88.2%;
                                                                                                                                                               2 C; 0 G;
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                       В₽
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Pred. No. 1
                                                                                                                               Score 13.8; DB 1; Length 17; Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen
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Human NOGO Inozyme #162
                                               12-MAR-2002 (first entry)
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cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; MH; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Crentyfeld+1-13-bases; correproparational accident; CVA; Alzheimer's disease; clerosis; ALS; charitisfold* Homo sapiens. Synthetic. Human; ss; antisense therapy; cerebroprotective; nootropic; Creutzfeldt-Jakob disease; muscular cytostatic; antiinflammatory; haemostatic; dystrophy; neurodegenerative disease ribozyme;

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11-FEB-2000; : 28-FEB-2000; : 06-MAR-2000;
WPI; 2001-607195/69.
                         Blatt L,
                                                                (RIBO-)
(BLAT/)
(MCSW/)
                                                                                                                                                                      09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                  16-AUG-2001.
                                                                                                                                                                                                                            WO200159103-A2
                                                  (CHOW/)
                                                                             RIBOZYME PHARM INC.
BLATT L.
                                                     CHOWRIRA B
                                                                 MCSWIGGEN J
                         Mcswiggen J,
                                                                                                                    ; 2000US-0181797P.
; 2000US-0185516P.
; 2000US-0187128P.
                              Chowrira
                            BM;
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Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, nervous system injury. and

Claim 88; Page 80; 200pp; English.

cregulates expression of a CD20 gene and a nucleic acid molecule which down regulates cregulates expression of a neurite growth inhibitor gene (NOGO). The CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a CC DNAzyme) an Inozyme (an endolytic nucleic acids (e.g. a ribozyme or a CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) proceed with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+. CC furthermore, it may be contacted with a cell to reduce CD20 activity of CC treat lymphoma, treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more CC treat lymphoma, (NHL), bulky low-grade or follicular non-CC leukaemia, HIW (human immunodeficiency virus) associated NHL, lymphocytic leukaemia, HIW (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, (imc) and inflammatory arthropathy. The NOGO-cc cc and treat a patient cation that is preferably Mg^2+. Furthermore, the presence of a divalent cation that is preferably Mg^2+. Furthermore, the contacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of the coll and treat a patient having a condition associated with the level of the coll and treat a patient may further comprise the use of one or more collected cell and treat a patient having a condition associated with the level of the collected cell and treat a patient having a condition associated with the level of the cell and treat a patient having a condition associated with the level of the cell and treat a patient selected with a cell to reduce NGO activit

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RESULT 2402
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AC (RIBO-)
PA (RIBO-)
PA (RIBO-)
PA (RIBO-)
PA (RIBO-)
PA (BLAT)
AC (CHOW/)
AC
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Best Local S
Matches 13
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                        The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The
                                                                                                                                                                                                                                    Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOGO Inozyme #161.
   regulates expression nucleic acids may be
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28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J.
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13; Conserv
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) MCSWIGGEN J.
) CHOWRIRA B M
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      enzymatic nucleic acids
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Pred. No. 1.9e+03;
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      (e.g. a ribozyme or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Length 17;
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CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) punched an amberzyme (cleaving RNA with an NGH triplet), a zinzyme (cleaving RNA CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA CC of CD20 in the presence of a divalent cation that is preferably Mg 2°+. CC Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more CC therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytoma (RNC), small B-cell lymphoma, low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytoma (RNC), small B-cell lymphoma, low-grade or follicular NHL, lymphoma, immunocytoma (RNC), small B-cell lymphoma, low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytoma (RNC), small B-cell lymphocytic lymphoma, immunocytoma, immunocytoma (RNC), small B-cell lymphocytic lymphoma, immunocytoma, 
Sequence 17 BP; 0 A; 11 C; 4 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNAzyme) an Inozyme (an endolytic nucleic acid cleaving
                                                                  an inozyme of
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뮹 δ Matches Local Similarity 241 ccrccercrceccrcc 257 Conservative 76.5%; 17 2 Pred. No. Score 13.8; DB 1; Mismatches 1.9e+03; 2; Indels Length 17; ٥, Gaps

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RESULT 2403
ABKOOO89
ID ABKOOO8
XX ABKOOO8
XX ABKOOO8
XX ABKOOO8
XX ABKOOO8
XX Cerebrc
XX Human;
XW Cerebrc
XW muscula
XW DNAZyme
KW B-cell
XW MCL; in
KW inflamm
XW cerebrc
XW muscula
XW parkine
XW crebrc
XW Creutzi
XX Creutzi
XX Homo sa
OS Synthel
XX WO2001!
XX WO2001!
XX WO2001!
XX I6-AUG
XX PEB
XX 11-FEB
PR 09-FEB
XX 11-FEB
PR 11-FEB Human NOGO Hammerhead Ribozyme #89. ABK00089 standard; (first entry) RNA;

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NGG0; hammerhead ribozyme; NNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HHV associated NHL; mantle-cell lymphoma; NCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; central nervous system injury; central nervous system injury; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkingon's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular neurodegenerative disease

Homo sapiens Synthetic.

09-FEB-2001; 2001WO-US004273

11-FEB-2000; 2000US-0181797P 28-FEB-2000; 2000US-0185516P

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RESULT 2404
ABK00237/C
ID ABK0023
XX
AC ABK0023
XC ABK0023
XX
DT 12-MAR
XX
DT 12-MAR
XX
W Human N
XX
Human N
XX
KW Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Crespression of a CD20 gene and a nucleic acid molecule which down regulates cregulates expression of a CD20 gene and a nucleic acid molecule which down considerable acids may be enzymatic nucleic acids (e.g. a ribozyme or a comparison of a neurite growth inhibitor gene (NGGO). The considerable acids cacid cleaving an RNA molecule consensing an Inozyme (an endolytic nucleic acid cleaving an RNA molecule consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a NGN triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA consensing RNA with a CD20 triplet), a zinzyme (cleaving RNA with a cleaving RNA with a cleaving RNA with a cleavin
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 88; Page 67; 200pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BLAT/)
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    Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
                                                                                                                                                                                   237/c
ABK00237 standard; RNA; 17
                                                                Human NOGO
                                                                                                        12-MAR-2002
                                                                                                                                                                                                                                                                                                                            1009 TCTCCTGTCTCAGCCTC 1025
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MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHOWRIRA B M.
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                                                                Hammerhead Ribozyme
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                                                                                                      (first entry)
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Pred. No. 1.9e+03;
5; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
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cc expression of a CD20 gene and a nucleic acid molecule which down regulates corregulates expression of a CD20 gene and a nucleic acid molecule which down conclusion of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The conclusion of the property of a neurite growth inhibitor gene (NOGO). The conclusion of the property of a condition of the conclusion of the presence of a divident cacid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motif). The CD20-targetting nucleic acid is used to cleaver RNA conference it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level cof CD20. The treatment may further comprise the use of one or more conference of a divalent cation that is preferably Mg^2+. CC (CD20. The treatment may further comprise the use of one or more conference of a divalent cacid incomprise the use of one or more conference of a divalent cacid incomprise the use of one or more catagetting nucleic acid may be used to cleave RNA (NGL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, (NGL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, conference of a divalent cation that is preferably Mg^2+. Furthermore, the presence of a divalent cation that is preferably Mg^2+. Furthermore, the conference of a divalent cation that is preferably Mg^2+. Furthermore, the conference of a divalent cacid with a cell to reduce NOGO gene in the cell induced neuropathy. The NOGO-cargetting nucleic acid may be used to create such and prevent of condition associated with the level of conference in a divalence of condition associated with the level of conference in a divalence of condition associated with the level of conference of a disease, ataxia, luntington's disease, creutzfeld-Jakob condition associated with the level of conference in a divalence of condition associated with the condition associated with t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; hymphocytic lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkingon's disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-2000; 2000US-0181797P
28-FEB-2000; 2000US-0185516P
06-MAR-2000; 2000US-0187128P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-FEB-2001; 2001WO-US004273.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 88; Page 69; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-607195/69.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-AUG-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCSWIGGEN J.
CHOWRIRA B M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease; muscular
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Sequence 17

BP; 14 A;

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ü 2 G; 0

ij,

1 U;

is a hammerhead ribozyme of

the invention 0 Other;

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RESULT 2406
ABA82505
ID ABA8250
XX
AC ABA8250
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ABL46735
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Best Local S
Matches 15
                                                                                                                                       Query Match
Best Local S
Matches 14
                                                                                                                                                                                                        The present invention relates to oligonucleotides that downregulate the expression of human Grb2-related with Insert Domain (GRID) gene. GRID is a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful for modulating the expression of GRID, to treat conditions such as tissue/graft rejection and leukaemia. The oligonucleotides can also be administered in conjunction with other therapies such as radiation, chemocherapy and cyclosporin treatment. The present oligonucleotide was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                     New nucleic acid(s) for regulating the Grb2-related (GRID) gene comprises using antisense and enzymatic molecules such as hammerhead ribozymes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL46735 standard; RNA; 17
              ABA82505
                                  ABA82505 standard; DNA; 17
                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                               Claim 4; Page 66; 108pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-FEB-2000; 2000US-0184594P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-FEB-2001; 2001WO-US005957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200162911-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             co-scimulatory adaptor protein;
leukaemia; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
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                                                                                                                   CACCTGCCTCAGCCTCC 387
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                                                                                                                                                                                     BP; 4 A; 10 C; 2 G; 0 T; 1 U; 0 Other;
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                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 13.8; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                  Score 13.8; DB 1;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Domain; GRID; T-cell;
tissue rejection; graft rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                         Mismatches
                                                                                                                                                              DB 1; Length 17;
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RESULT 2407
ABA82230/c
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM genes have osteopathic activities. The genes can be used in gene therapy, antisense therapy and in the production of vaccines. They can be used in the diagnosis and treatment of bone disorders including osteoporosis, Pager's disease, sclerostogis, osteomalacia and fibrous dysplassia.

PABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3; sequence tagged site; STS; osteoporosis; osteopathic; gene therapy; antisense therapy; vaccine; bone disorder; Paget's disease; adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carulli JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-APR-2000; 2000US-00543771.
05-APR-2000; 2000US-00544398.
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                                                                                                                                                                                                                                                                                                                                                                Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 36; 443pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-US016951
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                                                                                                                                                                                      ABA82230;
                                                                                                                                                                                                             ABA82230 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                         exemplification of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bone mass (HBM)
                                                                                                                                                                                                                                                                                            GGGCTCAAGCGATTCTC 1012
                                                                                                                                                                                                                                                                        GCGCTCAAGCAATTCTC
                                                                                                                                        region
                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                 BP; 4 A; 6 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Little
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                        physical map preparation STS marker #189
                                                                                                                                                                                                              DNA; 17
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                                                                                                                                                                                                                                                                                                                               1.4%;
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the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recker RR,
                                                                                                                                                                                                              BP.
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                                                                                                                                                                                                                                                                                                                                                                                         present invention
                                                                                                                                                                                                                                                                                                                                                                  G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                    Score 13.8; D
Pred. No. 1.9e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      zmax1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes and proteins useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of e.
                                                                                                                                                                                                                                                                                                                                1.9e+03;
                                                                                                                                                                                                                                                                                                                                            DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .g. osteoporosis.
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                                                                                                                                                                                                                                                                                                                                           Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                      Gaps
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Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; sequence tagged site; STS; osteoporosis; osteopathic; gene t

Synthetic.

łomo sapiens.

WO200177327-A1

sclerostosis;

osteomalacia;

vaccine;

osteoporosis; osteopathic; gene therapy; bone disorder; Paget's disease; adapter; fibrous dysplasia; PCR primer; linker; ss

antisense therapy;

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                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2408
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Best Local :
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                                  04-OCT-2000;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM genes have osteopathic activities. The genes can be used in gene therapy, antisense therapy and in the production of vaccines. They can be used in the diagnosis and treatment of bone disorders including osteoporosis, in the diagnosis and treatment of bone disorders including osteoporosis,
                                                                                                                                26-MAY-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the diagnosis and treatment of bone disorders including osteoporosis, Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia. ABA82700 and AAG68168 to AAG68193 represent sequences used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-APR-2000;
05-APR-2000;
                                                                                                                                                                                                                                                                                Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modulating bone mass for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New high
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                                                                                                                                                                                                                                                                                                                                   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8863
                                                                                                                                                                                                                                                                                                                                                                                                            ABN08871 standard; DNA; 17 BP
                                                                                                                                                                                                                                  WO200192524-A2
              30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                  25-MAY-2001;
                                                                                                                                                                                                           06-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGGGCTCAAGCGATTC 1010
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 34; 443pp; English.
2000US-0207456P.
2000US-0234687P.
2000US-0236359P.
2000US-0236359P.
2001WO-US000661.
2001WO-US000663.
2001WO-US000664.
2001WO-US000666.
2001WO-US000666.
2001WO-US000667.
2001WO-US000667.
2001WO-US000669.
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2000US-00544398.
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                                                                                                                                                                                    2001WO-US016981.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.4%;
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Pred. No. 1
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Sequence 17

BP; 5 A; 4 C; 5 G;

w Ŧ;

0 ů,

0 Other

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CC induction, and in vaccines or for replacement therapeutic supplies of hGDMLP-1 mucleic acide in samples, as amplification substrates, to CC protein variants having desired phenotypic improvements, and for CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP CC laptore probes for surface-enhanced laser desorption ionisation and/or amount specifically of hGDMLP proteins, as specific biomolecule CC capture probes for surface-enhanced laser desorption ionisation, as C therapeutic supplement in patients having specific deficiency in hGDMLP-1 correction, and in vaccines or for replacement therapy. The CC poduction, and in vaccines or for replacement therapy. The CC disorder associated with the expression of hGDMLP-1, in particular heart CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The procent sequences represents an oligomer used in the arreening of the
                                The present sequence represents an oligomer used in the screening of the hgDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published pct sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GuY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-FEB-2001; 2001US-0266860P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   be used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (hGDMLP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention describes a human genome-derived myosin-like hgDMLP-1). The protein and polynucleotide sequences of hgDMLP-ed in gene therapy and vaccine production. The hgDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanzel
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Matches
                                                  Query Match
                                          Local
                197 CCATGTTGGTCAGGCTG 213
17
                                          Similarity
                                  Conservative
                                         1.4%;
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                                                   Score 13.8;
                                  Pred. No. 1.9
0; Mismatches
                                           No. 1.9e+03;
                                                    DB 1;
                                                   Length 17;
                                   Indels
                                  0;
                                   Gaps
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26-MAY-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                        Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                    Human GDMLP-1 17-mer scanning
                                         25-MAY-2001;
                                                              06-DEC-2001.
                                                                                   WO200192524-A2
                                                                                                       Homo sapiens.
                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                            ABN09432;
                                                                                                                                                                                                                                ABN09432 standard; DNA; 17
 2000US-0234687P
2000US-0234687P
2000US-0236359P
                                            2001WO-US016981.
                                                                                                                                                                                         (first entry)
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                                                                                                                                                                     SEQ ID NO:5 sequence SEQ ID NO:9424.
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ABN09435/c
ID ABN094
XX
AC ABN094
XX
AC ABN094
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DT 29-MAY
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DE Human
XX
Human
KW muscle
KW skelet
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2410
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Best Local S
Matches 15
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30-JAN-2001;
30-JAN-2001;
                   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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                                                                                                                                                                                               ABN09435 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17
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30-JAN-2001;
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30-JAN-2001;
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                                                                                                                                                                                                                                                                                                                     346
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                                                                                          GDMLP-1
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2001WO-US000661.
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2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
2001WO-US000667.
2001WO-US000669.
2001WO-US000669.
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                                                                                                                            (first entry)
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                                                                                        scanning
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Pred. No. 1.9e+03
                                                                                        SEQ
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                                                                                        sequence
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RESULT 2411 ABN06554/c ID ABN06554 standard; DNA; 17

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17

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343 CAAGCTGGTCTCCTGAG 359

Query Match Best Local S Matches 15

l Similarity 88.

1.4%;

0;

Score 13.8; DB 1; Pred. No. 1.9e+03; 0; Mismatches 2

Indels

<u>,</u>

Gaps

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DB 1;

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mucleic acids can be used as probes to detect, characterise and quantify to highMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                              The present sequence represents an oligomer used in the screening of th hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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27-SEP-2000;
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Sequence 17
                                                                                                                                                                                                                                                                                                                                                                 protein 1 (hGDMLP-1). The protein and polynucleotide sequences of 1 can be used in gene therapy and vaccine production. The hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 9427; 214pp; English.
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2001WO-US000667
2001WO-US000668
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2001WO-US000669
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   G; 2 T; 0 U; 0 Other;
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expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP used as immunogens to raise antibodies that specifically recognise hGDMLP proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence in the expression of hGDMLP-1 is localised to chromosome 22. The present sequence in the present invention. N.B. of the sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
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30-JAN-2001;
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21-SEP-2000;
27-SEP-2000;
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                                                                                                                                                                                                                                                                                               protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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Query Match

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          The present invention describes a human genome-derived myosin-like CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1 CC mucleic acids can be used as probes to detect, characterise and quantify CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to CC provide initial substrates for the recombinant engineering of hGDMLP-1 CC protein variants having desired phenotypic improvements, and for CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be CC used as immunogens to raise antibodies that specifically recognise hGDMLP CC 1 proteins, as standards in assays used to determine the concentration CC and/or amount specifically of hGDMLP proteins, as specific blomolecule CC capture probes for surface-enhanced laser desorption ionisation, as CC therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The
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21-SEP-2000;
27-SEP-2000;
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skeletal muscle
                                                                                                                                                                                                                                      New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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screening; ss.
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are

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Best Local S
Matches 15
The invention relates to a method for identifying a molecule involved in lipid regulation comprising identifying a molecule that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type gene, Zmax1. Compounds identified by the method are useful for treating, diagnosing, preventing or screening for normal and abnormal lipid-associated conditions, including arteriosclerosis, cardiovascular disease, stroke, and osteoporosis. The compounds may also be used in the treatment or prevention of diabetic atherosclerosis, neurovascular conditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in gene therapy, pharmaceutical development, and diagnostic assays for bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                             Identifying molecules involved in lipid regulation, useful diagnosing, treating or preventing e.g., arteriosclerosis, identifying a molecule that binds to high bone mass gene or corresponding wild type gene.
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                                                                                                                                                                                                              Disclosure; Page 41; 409pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAY-2001; 2001WO-US016946
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disorders.

Molecules identified by

comparison

of Zmax1

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RESULT 2415
ABK23027/c
The invention relates to a method for identifying a molecule involved in compliance of a molecule to for identifying a molecule that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type gene, Zmaxl. Compounds identified by the method are useful for treating, consisted conditions, including arteriosclerosis, cardiovascular conditions, including arteriosclerosis, cardiovascular conditions of diabetic atherosclerosis, neurovascular conditions caused by plaque build-up, poor circulation due to plaque conditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in compound the therapy, pharmaceutical development, and diagnostic assays for bone conditions can be used as surrogate markers in pharmaceutical the conditions can be used as surrogate markers in pharmaceutical in the conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical in the conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical and in the conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate markers in pharmaceutical conditions can be used as surrogate can be used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lipid-associated condition; arteriosclerosis; cardiovascular dis osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque neurovascular condition; wound healing; gene therapy; PCR primer bone development disorder; antiarteriosclerotic; cardiovascular;
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Pred. No. 1
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CGCCCGGCTTATTTTTA

Matches Query Match

Local

l Similarity

1.4%;

Score 13.8; I Pred. No. 1.9e 0; Mismatches

1.9e+03;

DB 1; 2

Length 17;

Indels

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Gaps

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Sequence 17

BP; 6

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RESULT 2416
ABS75325/c
ID ABS75325/c
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                                                            This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecules encoding human Zmax1 and and adapters of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        treatment of bone diseases. Sequences ABK22776-ABK23411 represent molecules encoding human Zmax1 and HBM, and PCR primers, probes, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 5 A; 5 C; 4 G; 3 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           papp-E; human; pregnancy associated plasma protein E; abortive;
contraceptive; gene therapy; vaccine; pregnancy; antenatal; dia
dysgenetic pregnancy; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS75325;
                                                      proteins in chorionic villus samples, antenatally. This sequence represents human PAPP-E genes described in the di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnanc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-697817/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-2001; 2001US-00827998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PAPP-Ea associated 17-mer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GUYY/) GU Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SHANNON M E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Page 187;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for preventing or aborting pregnancy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis;
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                                                                                                                          RESULT 2417
                                                                                                                                                                                                The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or rissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstruct pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
(SYNT )
(THOM/)
                                                                                                                                                      examine genetic drift and mutations within diseased the presence of CLCA1 RNA in a cell. This sequence renzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human CLCA1 gene enzymatic nucleic acid #439
                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 60; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-217145/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Thompson J, Grupe A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2001; 2001WO-US024970.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oxygen therapy;
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 17
                                                            Similarity
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SYNTEX USA LLC.
THOMPSON J.
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 CTGAGATCAAGAATACT 1
                             CTGAGATCAAGCATCCT 536
                                                                                                                        BP;
                                                            Conservative
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                                                                         Score 13.8; DB 1
Pred. No. 1.9e+03
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                                                                                                                          0 Other;
                                                                                           DB 1;
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                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Szymkowski DE;
                                                                                                                                                                        represents
                                                                                                                                                                                     cells or to detect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chronic obstructive
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                                                            Gaps
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ACN14418/
ID ACN1
XX
AC ACN1
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DT 22-A

ACN14418;

ACN14418 standard;

RNA; 17

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22-APR-2004

(first entry)

RESULT 2419

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RESULT 2418
ACN01141
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                                                  Query Match
Best Local Similarity
Matches . 11; Conserv
                                                                                                                                 The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (MAV). The nucleic acid molecules are useful for treating a condition related to MAV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic molecy. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WNV Hammerhead Ribozyme substrate
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                                                                                                        Sequence 17
                                                                                                                                                                                                                                                                                                                                              Claim 23; SEQ ID NO 1131; 495pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-706994/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-OCT-2000; 2000US-0242411P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    West Nile Virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-OCT-2001; 2001WO-US048350.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RIBOZYME PHARM INC.
BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MCSWIGGEN J A.
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                        GTCAGGCTGGTCTCAAA 1125
GUCAGGCUCCUCAAA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen JA;
                                                   1.4%;
nilarity 64.7%;
Conservative
                                                                                                           BP; 4 A; 6 C; 3
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                                                     4.
                                                                                                           G; 0 T; 4 U; 0 Other;
                                                                 Score 13.8;
Pred. No. 1.
                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO
                                                                 1.9e+03
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   EXAXEXEXEXE
                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to nucleic acid molecules that modulate replication CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for CC treating a condition related to WNV infection e.g. pancreatitis, CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid conlecule is selected from the group of ribozymes consisting of CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at CC least three of the 5' terminal nucleotides and a 3' end modification of a CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1900 CC are claimed, however, SEQ ID NO 2194-2206 and 17502-17514 are not given CC in the specification. The present sequence is that of a nucleic acid colecule of the invention
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid molecule that modulates replication of West Nile (WNV), useful for treating a condition related to WNV infection e pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
virucide; neuroprotective; antibacterial; replication; percephalitis; myocarditis; meningitis; infection; hepatiliver failure; cancer: cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 23; SEQ ID NO 14421; 495pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-OCT-2000; 2000US-0242411P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-OCT-2001; 2001WO-US048350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200268637-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      West Nile Virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amberzyme; Zinzyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      liver failure; cancer; cirrhosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WNV minus strand Amberzyme substrate SEQ ID
                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 4 A; 3 C; 6
                                                                                                          22-APR-2004
                                              WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
                                                                            WNV minus
                                                                                                                                                                     ACN08942
                                                                                                                                                                                                                                                                               1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002-706994/76
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BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCSWIGGEN J
                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                              GTCAGGCTGGTCTCAAA 1125
                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                 GTCAGGCTCCTCTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen JA;
                                                                             strand Hammerhead Ribozyme substrate
                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                         (first entry)
                                                                                                                                                                     RNA;
                                                                                                                                                                                                                                                                                                                          1.4%;
                                                                                                                                                                      17
                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                        G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                          Score 13.8;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hammerhead;
                                                                                                                                                                                                                                                                                                                           1.9e+03;
                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO 14421.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inozyme; DNAzyme;
    Inozyme; DNAzyme;
                                                                               SEQ
                                                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                              Indels
                                                                               IJ
                                                                               ö
                                pancreatitis;
                                                                                                                                                                                                                                                                                                              0;
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                                                                                                                                                                                                                                                                                                              Gaps
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RESULT 2421
ACN04915/c
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                     treating a condition related to MNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid molecule that modulates replication of West Nile (WNV), useful for treating a condition related to WNV infection e. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the West Nile Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 23; SEQ ID NO 8945; 495pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-706994/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-OCT-2000; 2000US-0242411P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   West Nile Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amberzyme; Zinzyme;
                                                                                                     WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
virucide; neuroprotective; antibacterial; replication; pancreatitis;
encephalitis; myocarditis; meningitis; infection; hepatitis;
                                                                                                                                                       WNV DNAzyme substrate SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pancreatitis, meningitis, hepatocellular
                                               West Nile Virus
                                                                          encephalitis; myocarditis;
liver failure; cancer; cir:
Amberzyme; Zinzyme; ss.
                                                                                                                                                                                   22-APR-2004
                                                                                                                                                                                                                                       ACN04915 standard; RNA;
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                                                                                                                                                                                                                                                                                                                                    CGCCAGGTTGATCTTGA 822
                                                                                                                                                                                                                                                                                                         CGCCAAGUUGUUCUUGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 3 A;
                                                                                                                                                                                   (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                   4 C;
                                                                                                                                                                                                                                                                                                                                                                          1.4%;
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                                                                                         cirrhosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (WNV).
                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid molecules that modulate replication
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                                                                                                                                                                                                                                                                                                                                                                                                                   <u>ი</u>
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Pred. No. 1.
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                                                                                                                                                           4918.
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                                                                                                                                                                                                                                                                                                                                                                             1.9e+03
                                                                                                                                                                                                                                                                                                                                                                                                                    0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
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Gaps

0

06-SEP-2002

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RESULT 2422
ACN01975/c
ID ACN0197
XX
AC ACN0197
XX
DE WNV In
XX
WNV; W
KW VITUCI
KW encept
KW encept
KW 1iver
KW Amber:
XX
PN WO200
XX
PD 06-SE
XX
PF 19-O(
XX
PF 19-O(
XX
PA (RIB
PA (BIB
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least then 2'.O-methyl modifications, phosphorothicate linkages on at least three of the 5' terminal nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                            MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                         ACN01975 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-706994/76.
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      (RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L.
                                                   20-OCT-2000; 2000US-0242411P
                                                                                  19-OCT-2001; 2001WO-US048350
                                                                                                                                                                                West Nile Virus.
                                                                                                                                                                                                                                                                                                              WNV Inozyme substrate SEQ ID NO 1965.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-)
(BLAT/)
                                                                                                                                                                                                                               liver failure; cancer; cirrhosis; Hammerhead;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      805
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGCCAAGTTGTTCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGCCAGGTTGATCTTG 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 4918; 495pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen
                                                                                                                                                                                                              Zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.4%;
ilarity 88.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 13.8;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.9e+03;
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RESULT 2423
ABT34829/c
ID ABT3482
XX ABT3482
XX ABT3482
XX Tumour
XX Cytosta
KW antiser
KW schizog
KW human i
XX HOMO 86
XX HOMO 86
XX PN WO2003(
XX 27-WAR
XX 27-WAR
XX 27-WAR
XX PF 17-SEP
XX MOLE-I
PI Telerm
XX WPI; 2
XX WPI; 2
XX WPI; 2
XX Weith t
PT and tr
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of molecule is selected from the group of ribozymes consisting of nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; geantiesne; sense; tumour; cell degeneration; cancer; Alzheimer's schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 6 A; 4 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 23; SEQ ID NO 1965; 495pp; English
                                                                                                                                                                                                                                                                                                   WO2003025175-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-706994/76.
                                                                                                                                                                                            17-SEP-2001; 2001FR-00011978.
                                                                                                                                                                                                                              17-SEP-2002;
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                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                              2002WO-IB004208.
                                                                                                                        Amson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                       gene chip;
's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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New isolated nucleic acid, useful for treating viral diseases with tumors and cell degeneration, also related polypeptides, and transfected cells.

associated antibodies

Disclosure; Page 88; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence with, after optimal CC disparent, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (antilsense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, collypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell cegeneration, specifically cancer but also Alzheimer's disease and CC diseases. The polypeptides can also be used to generate antibodies, and colings. The nucleic acid sequences of the invention can be used in gene CC chips. The nucleic acid sequences of the invention can be used in gene CC therapy. This polynucleotide sequence represents a tumour suppression created human fukutin oligonucleotide of the invention.

Sequence 17 B₽; ഗ Đ; 7 C; 1 G; 4 T; 0 U; 0 Other;

Ś Best Loc Matches Local 479 l Similarity 15; Conserv AGTGCAGTGGTGATC 495 Conservative 1.4%; Score 13.8; DB 1; Pred. No. 1.9e+03; 0; Mismatches 2 DB 1; 2 Length 17; Indels 0 Gaps 0

RESULT 2424

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17

AGTGGAGTGGTATGATC 1

ABT39507 standard; DNA; 17

ABT39507

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 5144.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

WO2003025175-A2

27-MAR-2003

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978

(MOLE-) MOLECULAR ENGINES LAB

P Amson R, Tuijnder M;

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 635; 720pp; French

CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence that CC hybridizes to them under highly stringent conditions, or the complement CC of any of them, or the corresponding RNA. The novel isolated nucleic CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, CC polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC diseases that are characterised by development of tumours or cell CC diseases that are characterised by development of tumours or cell CC diseases that are characterised by development of tumours or cell CC diseases. The polypeptides can also Alzheimer's disease and CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in CC diseases. The polypeptides can also be used to generate antibodies, and CC diseases. The polypeptide and antibodies are useful as components of protein CC chips. The nucleic acid sequences of the invention can be used in gene CC therapy. This polynucleotide sequence of the invention can be used in gene CC related human fukutin oligonucleotide of the invention

Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

片 δ Matches Query Match Best Local 837 GATCTGCCTGCCTCGGC 853 15; Similarity GATCTGCCAGCCTTGGC 17 Conservative 1.4%; 0 Score 13.8; Db 1, Pred. No. 1.9 0; Mismatches DB 1; Length 17; Indels 0 Gaps 0

RESULT 2425 ABT35178/c

ABT35178 standard; DNA; 17

ABT35178

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 815.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

WO2003025175-A2

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

Telerman A, Amson R, Tuijnder M

2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 128; 720pp; French.

CCXXXXXI given in The invention relates to a novel isolated 17 mer nucleic acid given in the specification, a sequence containing at least 15 sequence, consecutive

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RESULT 2426
ABT38397/C
ID ABT3839
XX ABT3839
XX ABT3839
XX Tumour
XX Cytosta
KW antiser
KW Schizoj
KW human i
XX Homo si
XX Telerm
XX HOMO Si
XX LT SEP
XX HOMO Si
XX LT SEP
XX HOMO Si
XX LT SEP
XX LT 
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Best Local S
Matches 15
                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour suppression related human fukutin oligo SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABT38397;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2001; 2001FR-00011978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004208.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-JUN-2003
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related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fukutin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sense; tumour; cell degeneration; cance
ia; protein chip; gene therapy; tumour
in; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Tuijnder M;
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           opic; neuroleptic; gene chip; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            of any of them, or the corresponding RNA. The novel isolated nucleic CC acids of the invention are useful as probes and primers for detecting, condensitying, quantifying and/or amplifying a nucleic acid, e.g. as one CC identifying, quantifying an invitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, cells containing the polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell cethizophrenia. Analysis of the expression of the 17 mer nucleic acids in CC patient samples is useful for diagnosis and/or prognosis of these cCC diseases. The polypeptides can also be used to generate antibodies, and CC thips. The nucleic acid sequences of the invention can be used in gene ctherapy. This polynucleotide sequence represents a tumour suppression ccc related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local (
Tumour suppression
                                                13-JUN-2003
                                                                                         ABT40193;
                                                                                                                                  ABT40193 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic
                                                                                                                                                                                                                                                                                         479
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                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                              AATGCAGTGGTGGGATC 1
                                                                                                                                                                                                                                                                                     AGTGCAGTGGTGTGATC 495
                                                                                                                                                                                                                                                                                                                                  Conservative
                                             (first entry)
  related human fukutin oligo SEQ ID
                                                                                                                                                                                                                                                                                                                                                       88.2%;
                                                                                                                                    ВP
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                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                         Score 13.8;
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                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                         1.9e+03
                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or the complement
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      5830
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                                                                                                                                                                                                                                                                                                                                     Gaps
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RESULT 2427
ABT40193/c
ID ABT4019
XX ABT4019
XX ABT4019
XX Tumour
XX Tumour
XX Cytosta
XX Cytosta
XX Cytosta
XX Cytosta
XX Homo sa
X Homo sapiens schizophrenia; protein chip; gene human fukutin; ds. Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; antisense; sense; tumour; cell degeneration; cancer; Alzheimer' gene chip; 's disease;

WO2003025175-A2

27-MAR-2003

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

WPI; 2003-313353/30. A, Amson æ, Tuijnder M;

Telerman

with tumors and cell d and transfected cells. New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

Disclosure; Page 715; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that

mer sequence,

Page

505;

720pp;

French.

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RESULT 2428
ABT35657/c
ID ABT3565
XX Cytosta
XX Homo sa
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                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid, useful with tumors and cell degeneration, and transfected cells.
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M;
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Pred. No. 1.9e
0; Mismatches
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CC component of a gene chip, in vitro as (anti) sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, CC polypeptides, vectors containing the nucleic acids, cells containing the CC vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell CC degeneration, specifically cancer but also Alzheimer's disease and CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in CC pattent samples is useful for diagnosis and/or prognosis of these CC diseases. The polypeptide and antibodies are useful as components of protein CC chips. The nucleic acid sequences of the invention can be used in gene CC therapy. This polynucleotide sequence represents a tumour suppression CC related human fukutin oligonucleotide of the invention
Sequence 17
BP;
3 A;
7 C; 3
G; 4 T; 0 U;
              0 Other;
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99999999999999998**%**

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Matches
                                   Query Match
Best Local 9
              479
                             15;
17
                                    Similarity
              AGTGCAGTGGTGATC 495
                             Conservative
                                    1.4%;
                            0;
                                    Score 13.8;
Pred. No. 1
                             Mismatches
                                     .9e+03
                                            DB
                                            1.
                                            Length
                              Indels
                             0
                              Gaps
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RESULT 24 ABT36213 12-JUN-2003 ABT36213 ABT36213 standard; DNA; 17 2429 suppression (first entry) related BP. human fukutin oligo SEQ ij ĕ

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene antisense; sense; tumour; cell degeneration; cancer; Alzheimer's die schizophrenia; protein chip; gene therapy; tumour suppression; schizophrenia; human fukutin; protein ds. gene chip; disease;

WO2003025175-A2

Homo sapiens

27-MAR-2003

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

WPI; Telerman A, Amson R, Tuijnder

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 249; 720pp; French

given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one

Disclosure; Page 184;

720pp;

French.

S 밁

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RESULT 2430
ABT37096
ID 37096
XX ABT3709
XX ABT3709
XX Tumour
XX Cytosta
KW Cytosta
KW Schizop
KW Schizop
KW Homo sa
XX The invitit tu
XX The inv
CC Given in
CC Gidentif
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Best Local S
Matches 15
                    The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence. a sequence with after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro and such a sequence acids, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression;
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vector or ant
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         schizophrenia;
human fukutin;
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                                                                                                                                                                                                                                                                                                                          Disclosure; Page 352; 720pp; French.
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ds.
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.9e+03;
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directed

against the polypeptides

are useful

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RESULT 2431
ABT38743/c
ID ABT3874
XX ABT3874
XX ABT3874
XX Tumour
XX Cytosta
KW antiser
KW Schizor
KW Schizor
KW Schizor
KW Homon 86
XX Homo 86
XX 17-SEP
XX 17-SEP
XX 17-SEP
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Best Local Similarity
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in virgonitying, antipose, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 546; 720pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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human fukutin;
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Pred. No. 1.9e+03;
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